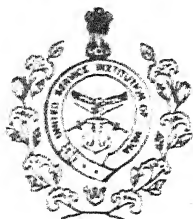


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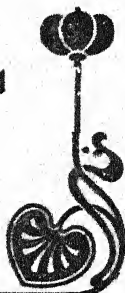
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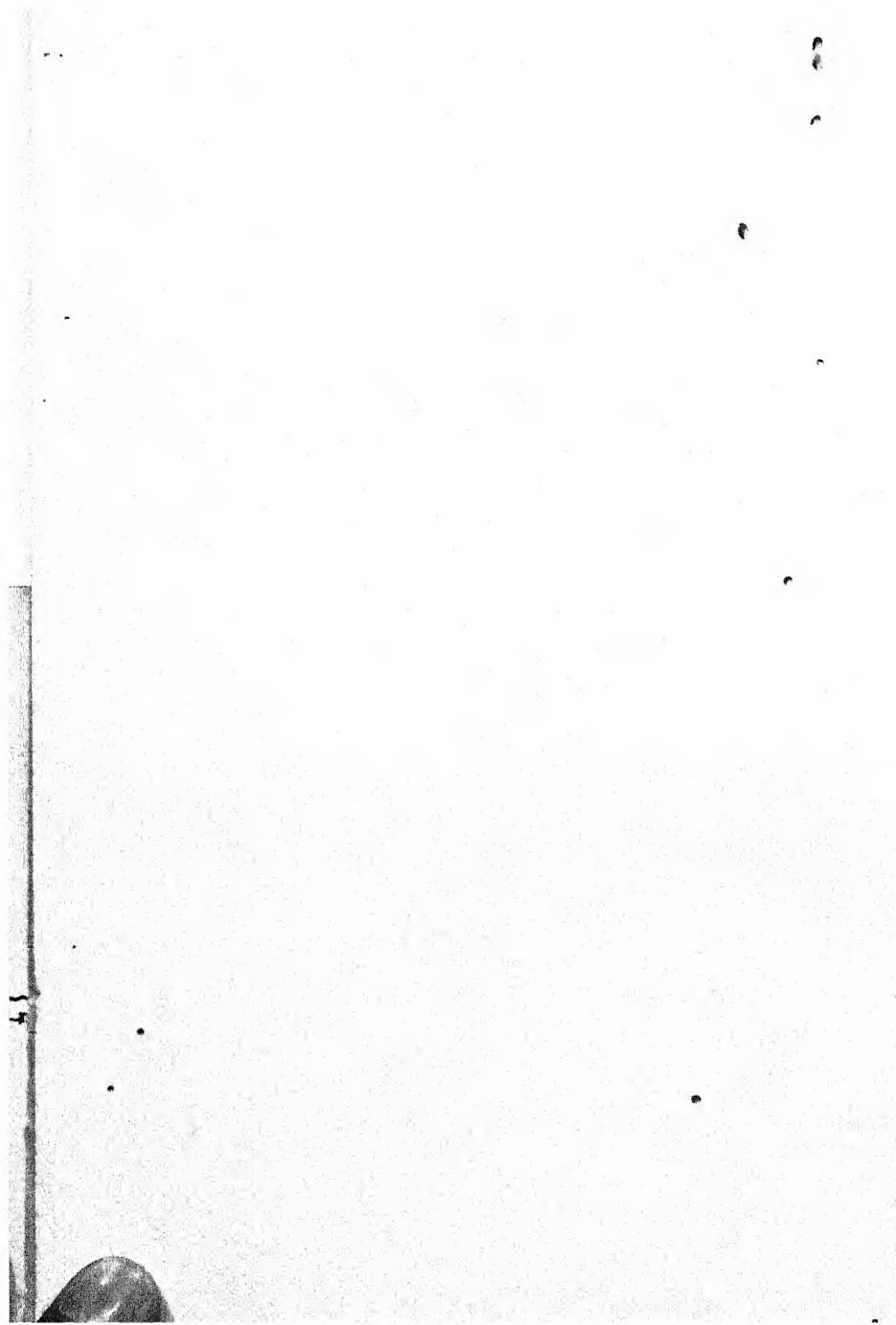
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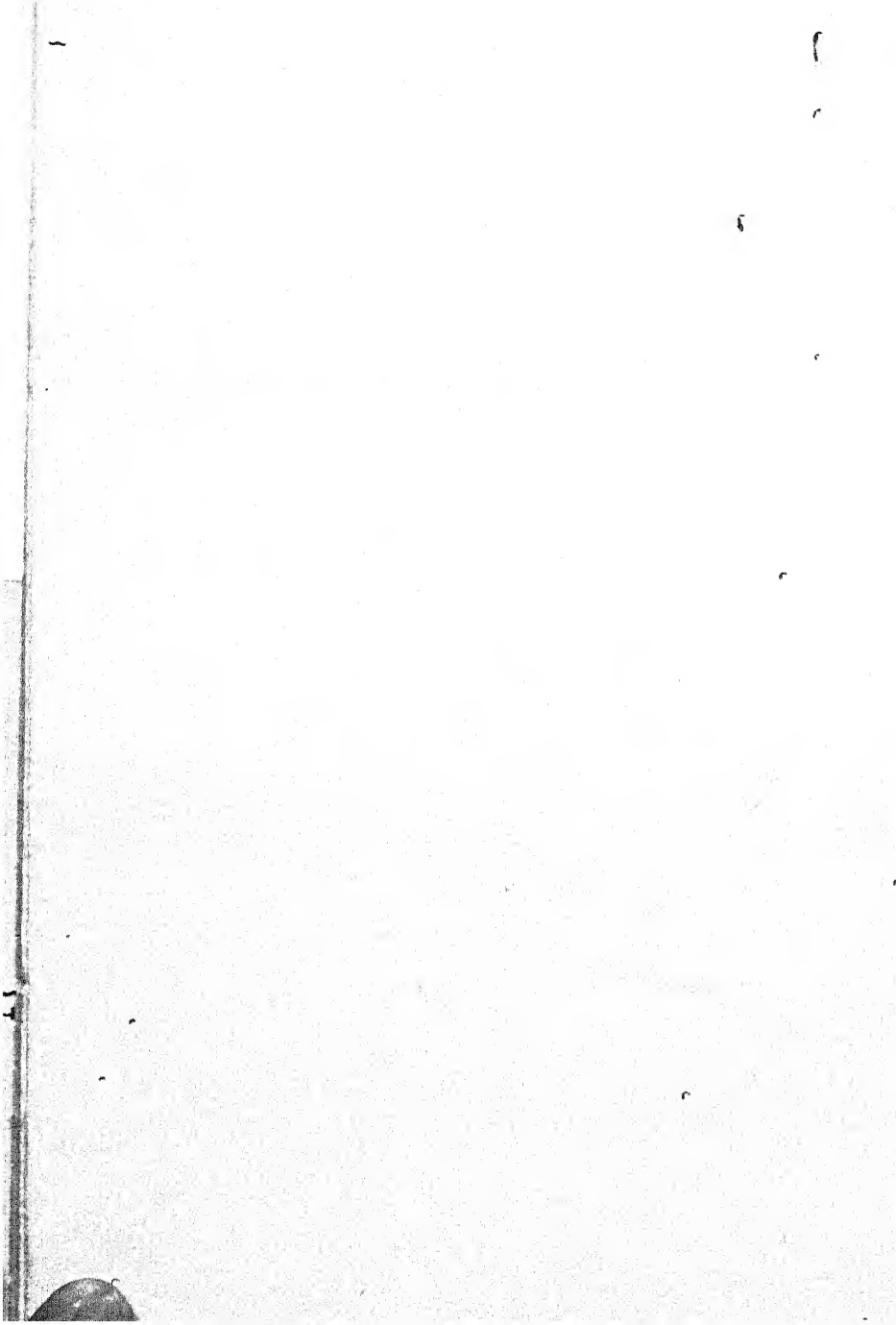
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LECTURES ON THE STRATEGY OF THE
RUSSO-JAPANESE WAR

GIVEN AT THE
INDIAN STAFF COLLEGE AND AT ALDERSHOT



LECTURES ON THE STRATEGY
OF THE
RUSSO-JAPANESE WAR

BY
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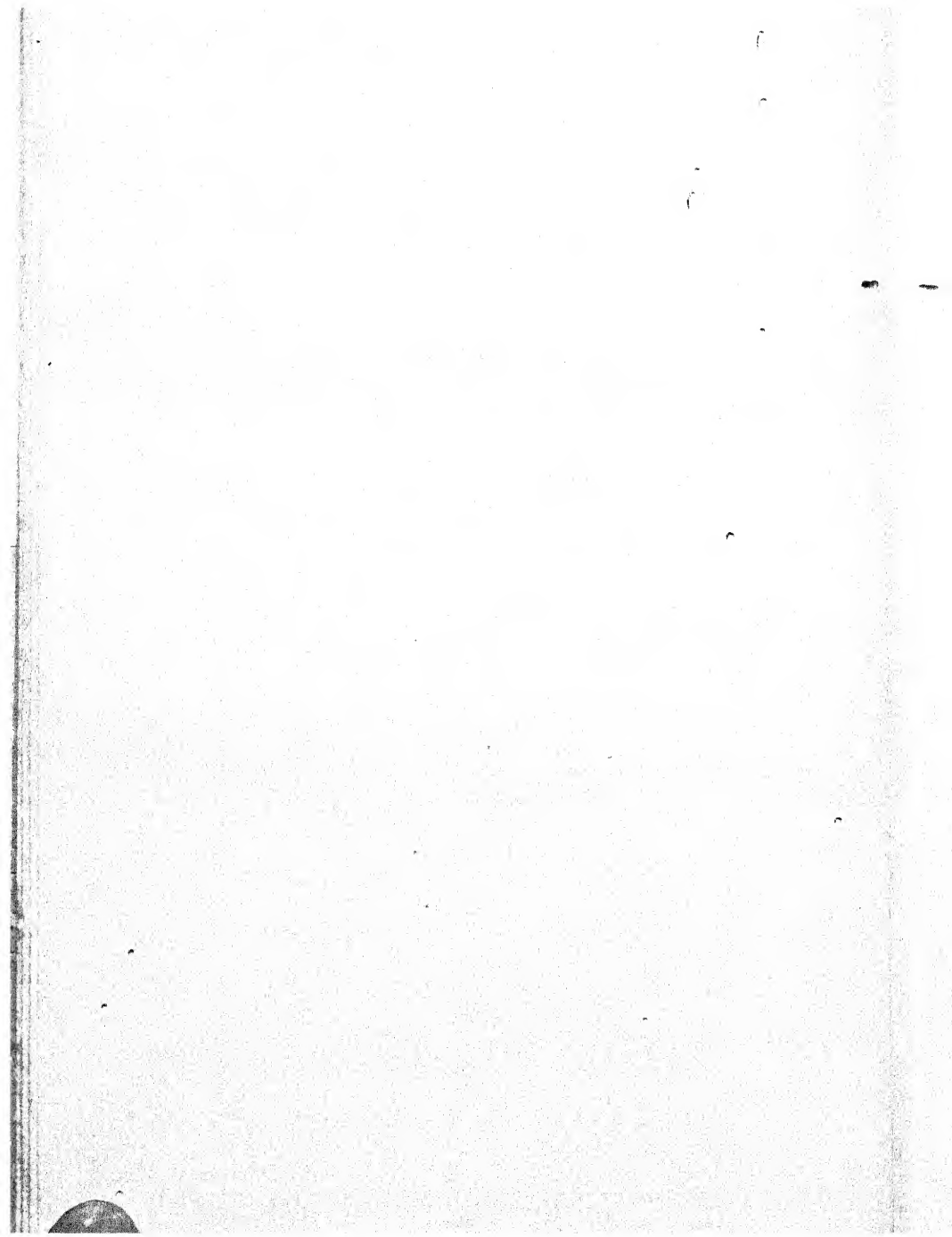
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NOTE

BOOKS CONSULTED

- British and German Official Accounts.
- "The Russian Army and the Japanese War," by General Kuropatkin.
- "Lectures on the Russo-Japanese War," published by the Rouskii Invalid.



LECTURES ON THE STRATEGY OF THE RUSSO-JAPANESE WAR

I

EVERY campaign possesses special features distinguishing it from others, and perhaps even rendering comparison with them difficult. These differences are conditioned by topography, fertility, and climate, by national characteristics, by relative strength and efficiency, by resources and armament, and by the character of the rival leaders.

Some acquaintance with these factors is therefore required before a just appreciation can be made of the significance of the strategical operations during the Russo-Japanese struggle in Manchuria.

The first factor to be considered is the geography of the seat of the war.

The soldier regards geography from a somewhat different standpoint to that adopted by the civilian.

To the civilian the term geography means information as to the physical features of a country, as to its resources, climate, railways, rivers, harbours, cities, inhabitants, exports, imports, policy, etc., which will be valuable in a commercial, political, or even social sense. The soldier, however, looks on all countries as possible theatres of war, and though he may and does seek for information similar to that required by the civilian, he enquires how the various physical, meteorological, commercial, human, and political factors would affect the progress of a campaign carried out in the country the geography of which he is studying.

One of the first, if not the very first consideration, when

regarding geography from a military point of view, is therefore the communications of a potential theatre of war.

Speaking generally, the direction taken by roads is determined by the trend of the mountain ranges, which to a certain extent condition the flow of the water: rained on to their sides, the river mouths as a rule also affording the best havens.

Roads usually follow the line of the least resistance—that is the water channels—but lateral communications between river valleys cross the intervening ranges of mountains or hills at their lowest points.

Hence, to discover the general direction of roads, it is first of all necessary to obtain a clear idea of the coast-line, mountains, and rivers of an area.

Coast. The coast-line of Manchuria and Korea from Shan-hai-kuan eastwards, extends for 2300 miles, of which 1700 belong to Korea. [Map 1.] Though in this long stretch there are many indentations, there are but few good harbours, excepting in the south of Korea. Elsewhere the coast is of a shelving character, with flat mud shore sloping gradually for miles out to sea, and hardly covered with water even at high tide.

On the shores of the Pe-chi-li gulf, the difference between high and low tide is sometimes as much as twenty-five feet, but along the southern and eastern coast of Korea it does not usually amount to more than eight feet, and at Port Arthur and Dalny is ten or twelve feet.

Commencing from the west the first port of interest is Ying-kou (Newchuang), on the Liao river. Vessels drawing about seventeen feet can cross the bar at the mouth of the Liao, and can lie in the stream, which is five hundred yards or more wide, though the fair-way is much less. Ying-kou possesses wharves, lighters, etc., capable of dealing with a fair trade, but is ice-bound during five months in each year.

Following the coast-line of the Liao-tung peninsula lying between Ying-kou and the Yalu, the next important arm of the sea is found in Fu-chou bay, where shelter may be

obtained, though at some distance from the shore, by vessels of moderate size.

A more favourable anchorage is Hu-lu-shun Bay, seventeen miles southwards, but this place is without facilities for landing.

To the south of Hu-lu-shun lies Society Bay, with the Port Adams inlet, the latter being eighteen miles long and open to vessels of the size of an average tramp steamer. The shore of the inlet is however shelving, and there are few if any landing facilities.

Chin-chou Bay gives little or no shelter. Louisa and Pigeon Bays afford protection to small steamers, from all but westerly winds. Port Arthur is ice-free, land-locked, and of considerable extent, but has little deep water. The entrance is about five hundred to six hundred yards wide, but the fair-way available for large vessels is not much more than one hundred yards. The deep water lies in continuation of the harbour mouth. There are docks, with accommodation for cruisers and smaller craft, and fairly good workshops. The harbour bottom is of stiff clay, with rock outcrop, which makes dredging difficult. The town and harbour were protected by a complete system of works. Thirty miles north of Port Arthur is Ta-lien-wan Bay, six miles long and six miles wide. To the south of this bay lies Dalny, an ice-free port, with docks, and harbour available for ships drawing thirty feet of water. Next come Yen-tai, Hou-tu-shih, and Pi-tsu-wo, also ice-free, but giving shelter only from west and south-west, and with shoal foreshore for several miles. Ta-ku-shan resembles Pi-tsu-wo, but is ice-bound for several months in the year. The mouth of the Yalu is navigable by small steam vessels, but further south the Che-chen river affords a good anchorage, though Chin-am-pho, twenty miles up the estuary of the Tai-tong river, is a better port. The river at Chin-am-pho is a mile wide, and is said to be deep, but the foreshore shelves for half a mile, and the harbour is in winter ice-bound.

Chem-ul-po, on the Han river, is the port of Seoul. It

is accessible to all ships throughout the year, though the anchorage is a mile from shore. In January and February the harbour is partially frozen, making discharge of cargo difficult.

Fu-san, to the south of Korea, is a fair harbour protected by an island. Gen-san, on the east of Korea, is a good port, usually ice-free in winter, but is shut off from the rest of the country by steep mountains.

Vladivostok, in the Amur river province, possesses docks, and a harbour with two entrances. It is fortified, but is so far ice-bound for five months in each year, that navigation is only rendered possible by continual use of ice-breakers.

Mountains. The mountains of Manchuria are in character rugged hills, whose lower portions are sometimes covered with plantations of scrub oak or hazel, at other places are cultivated in rough terraces, or again fall in open stony slopes; the summits often consist of bare masses of rock, affording positions accessible in only one or two places.

The hillsides, where not cleared for cultivation, are of soft soil, freely sprinkled and in some places almost covered with slabs of rock, and between the stones there grow in many localities a profusion of creepers and wild flowers.

The mountain area lies east and south of a line drawn roughly from Hsiung-yao-cheng to Fu-shun.

The hills, which are volcanic in origin, trend in a general north-easterly and south-westerly direction, and consist of a number of ranges lying roughly parallel to one another. These are separated by fairly level valleys, from one or two miles to four hundred yards wide, each boasting a stream, which rambles over a stony and shallow, though relatively wide bed.

The principal range of hills is the Feng-shui-ling, with their southern continuation the Hsiung-yao-shan. The former rear themselves to a total of about 5000 feet above sea-level, or 2000-3000 feet above their valleys; the latter are not more than 2000-3000 feet above the sea.

In these hills rise the Tai-tzu Ho¹ and its tributaries, which flow westwards, the Ai Ho and its tributaries flowing south to join the Yalu; also the Ta-yang Ho running southwards to Ta-ku-shan, and the Fu-chou Ho in the Liao-tung peninsula.

West of the mountain area lies a great plain, extending Plain. for one hundred and fifty miles or more westwards to the Mongolian hills. This plain, consisting of rich alluvial soil brought down by the great rivers Liao, Hun, and Tai-tzu, is highly cultivated, and supports a dense population.

The division between plain and mountain is in most localities distinctly marked, still in the area between Kai-ping and Liao-Yang at distances of about twenty or thirty miles, long somewhat serrated ridges run westwards on to the level ground, but usually end rather abruptly near the line followed by the railway.

In the district between Liao-Yang and Mukden, the dividing line between plain and hill is still less clear, a series of isolated hills, or groups of little hills, extending for ten or fifteen miles west of the upland area, but as in the more southerly district, ceasing at or near the line of railway.

The principal rivers watering the mountain and plain are Rivers. the Liao, the Hun and Tai-tzu. The Liao, rising in the Mongolian hills flows at first in a north-easterly direction for three hundred miles. Then bending south-east it continues in this course until, after passing the Manchurian boundary, it is turned southwards by a spur of the central Manchurian hills, and travels for three hundred miles, across the plain to which it gives its name, into the gulf of Pe-chi-li near Ying-kou. The Liao, twenty or thirty miles above Ying-kou, receives on its left bank the Hun and Tai-tzu rivers, which meet a few miles above this point. The general characteristic of all these rivers is that they flow on rather than below the plain, in broad relatively shallow beds, and between banks raised by the silt they bring down. In the rainy season they are therefore liable to burst their

¹ "Ho" is the Chinese word for river, "Shan" for mountain, and "Ling" for pass.

banks, and some ten years ago eight days' continuous rain flooded the whole Liao plain for nearly three weeks.

Steamers drawing seventeen feet of water can, as has been noted, navigate the Liao to Ying-kou, thirteen miles from its mouth. Large junks can sail up the river for some fifty miles, small junks ascend to Hsin-min-tun.

The Hun and Tai-tzu are navigable well above Mukden and Liao-Yang, and considerable timber trade by means of rafts of logs cut in the higher reaches, is done on both rivers.

The Hun, south of Mukden, is three hundred to four hundred yards wide, and the Liao is of similar width at Liao-Yang. When in flood both rivers apparently rise five or six feet, and are not easy to navigate owing to the rapidity of the current. From November to March they are covered with ice sufficiently thick to carry guns.

The tributaries of the Hun and Tai-tzu flow six or eight feet below the level of the fields in the plain, but their banks are sloping and grass or willow grown rather than precipitous, and the depth of water is not in spring more than one or two feet.

The Yalu rises about midway across the northern boundary of Korea, and after flowing south-west for three hundred miles empties its waters into the sea. In the upper reaches a wild region of mountain and forest is traversed, but some sixty miles from the mouth the southern bank is cultivated, though on the northern it is still enclosed by rocky hills and bluffs. The river is navigable by junks for about fifty miles, and small steamers can cross the bar at its mouth. At An-tung, it is over three-quarters of a mile wide.

The remaining mountain streams possess characteristics similar to the Fu-chou river. This flows over a stony bed, along a sandy valley from half a mile to two or three miles wide. The bottom of the stream is not more than two feet below the level of the valley, and its depth in spring is such that the water rarely rises to the level of the banks.

The Chinese cart, drawn by three or four mules, is the transport of Manchuria, hence almost every valley boasts a cart track, and the passes traversable by wheel transport possess roads which though not good are at worst practicable.

Roads and
Climate.

No road in Manchuria is metalled, and the great Imperial and Mandarin roads differ from the others only in that they are two or three times as wide, and if possible more full of ruts.

In many places the roads and tracks have sunk below the level of the surrounding country. This is partly due to wear, but mainly to the fact that the Chinese farmer is accustomed annually to remove the road surface, which is used as field dressing.

The roads become so heavy after rain, that carts habitually sink up to their axles in mud, and on these occasions the carter often seeks firmer soil by a small detour into the neighbouring ploughed fields. To prevent this the farmer digs at right angles to and close to the edge of the road, a series of little trenches about eighteen inches deep and wide and six or eight feet long.

In Manchuria rain usually falls in July, August, and September, coming as do the Monsoon rains in India, in bursts of from three to eight days, separated by bright intervals. During and immediately after rain cart traffic practically ceases, but as the soil is friable and dries quickly, the roads can be used again after two or three days' sunshine.

In October the roads freeze and remain hard, but rough and full of ruts, until March, when the scanty snow that has covered them during winter thaws by day. In April, the thaw regularly sets in but the relatively hot sun soon dries the roads, and keeps them so until the break of the Monsoon rains.

The climate is temperate to hot in summer, but is, at times, very cold in winter. The snowfall is light, but when a northerly wind blows, as happens two or three times a week, the thermometer by day falls to and below zero, whilst the nights are always bitterly cold.

The principal, that is the most used roads, are the Imperial road from Peking to the Yalu, and thence to Seoul. This road, which is some thirty to forty feet wide, runs, in Manchuria, from Hsin-min-tun to Mukden, a distance of 40 miles, thence to Liao-Yang, 40 miles. From this place it plunges south-eastwards into the mountains, and after crossing the Mo-tien-ling pass, about 3500 feet above the sea, and the main Feng-shui-ling range near Lien-shan-kuan, runs by Feng-huang-cheng to An-tung, 180 miles from Liao-Yang. In Korea it passes by Ping-Yang to Seoul, 140 miles from An-tung.

The coast road from the Yalu to Port Arthur, via Ta-ku-shan, 230 miles. The road from Port Arthur to Kirin, via Kai-ping, Hai-cheng 230 miles, and Mukden 310 miles from Port Arthur.

Railways. Three important railways existed. An extension of the Trans-Siberian line, known as the Chinese Eastern railway, running from near Chita to Vladivostok, for 200 miles in Russian, and for 950 miles in Chinese territory.

At Sungari, not far from Harbin, and 600 miles from the Siberian border, the Port Arthur branch left the main line, reaching Dalny in 600 miles, and Port Arthur in 615 miles. Both main line and branch were single, and of five-foot gauge, the rails being single-headed, with flat base, and weighing 62 lb. the yard; the ballast and sleepers were of but moderate quality. The sidings and crossing places were about ten miles apart, and the fuel burnt was wood, except in Southern Manchuria, where coal was used. On the Port Arthur branch were some thirty bridges of about 80 yards length, those at Liao-Yang and Mukden being more than 600 yards long, whilst the longest, that at Sungari, measured about 800 yards. At Kai-ping and near Teli-ssu were bridges of some 300 yards span. Apparently the maximum carrying capacity developed was about twelve pairs of trains per day.

The Imperial Chinese railway from Peking to Ying-kou, with a branch to Hsin-min-tun, which might perhaps

have been used by the Japanese to move troops against the Russian right. This was a single line, of British standard gauge.

Telegraph lines existed along the railways, and cables connected Fu-san with Japan, and Port Arthur with Chifu. Telegraphs and Cables.

The Liao valley is a great grain-producing area, beans and millet being principally raised. The millet, which grows to a height of ten feet, provides the Chinaman with most of the necessaries of life. The grain is used as food for man and beast, and for distillation of spirits, whilst the stalks are chopped up as fodder, or are employed to thatch houses, fence gardens, or even as firewood. Few domestic animals are bred, except pigs, but Mongolia produces quantities of sheep, cattle, and small horses, which are readily obtained from Hsin-min-tun. Resources.

The mountainous region produces little millet, but grows quantities of timber, and coarse silk is raised from silkworms which feed on the underwood.

Coal of fair quality exists near many of the big towns, the principal centres being Fu-shun, Yen-tai, Pen-hsi-hu.

The Chinese towns are all of one pattern, square built, and surrounded by a crenelated wall twenty to thirty feet high, and at top eight to ten feet wide. These walls are pierced by numerous pagoda-roofed gates. Within are unmetalled streets of tile-roofed shanties and shops, all one story high, and in the case of the larger towns suburbs of mud houses have grown up outside the city walls. Towns and Villages.

In the plain the villages consist of groups of thatched homesteads, with walls of mud or of sun-dried bricks plastered with mud, which when frozen are bullet proof. Each house stands in a garden surrounded by a more or less thick and well-built wall, or by a fence of plaited millet stalks. In the hills houses and walls are of roughly shaped stones, sometimes cemented, and the roofs are of thatch, slate, or tile.

II

Events
leading up to
the war.

THE war between Russia and Japan may be traced, as may most modern wars, to intense conflict of interest between the two powers.

In past centuries, and at intervals of about a hundred years, the Japanese had made incursions into Korea and Manchuria, and after successes more or less important, and occupation more or less prolonged, had been driven back to their islands by the Chinese. Korea and Manchuria were therefore the historical lines of Japanese expansion.

The Russians first appeared in the Far East in 1860, when the Amur province and Vladivostock were ceded to the Tsar by China. At this time Japan was governed under a feudal system, the country, though nominally ruled by the emperor, being really under the power of the nobles, called Daimios, and their armed Samurai retainers. In 1868, the nation, after a severe struggle, overthrew the Daimios. In 1875, the Russians occupied Saghalien, an event which, combined with the seizure of the Amur province, caused Japan to become alarmed for her independence.

The Japanese noting that the European strength lay in armament and organisation, now decided to avoid the fate of the Amur province and Saghalien, by organising the country, government, army and navy, on European principles. Japanese were therefore sent to Europe to assimilate Western ideas, and European teachers were freely imported into Japan.

1890. The combined result of this policy and of these events was such an increase in the material prosperity and population, that Japan felt, about 1890, the need for expansion.

At the same time it was feared that Korea, Japan's historical outlet on the mainland, inhabited by a physically fine, but in spirit decadent race, and ruled under the nerveless suzerainty of China, might fall into the hands of Russia. Japan therefore decided either to occupy Korea, or to render herself paramount in the peninsula.

With this object a quarrel was picked with China in 1894, the Chinese fleet was defeated off the Yalu, the passage of the river was forced, and Port Arthur and Wei-hai-wei were taken.

China thereupon concluded a peace on 30th April, 1895, under which Korea was declared independent, the Kuantung peninsula, that is, the area between Chin-chou and Port Arthur, was leased to Japan, and a large indemnity promised.

Russia, France, and Germany, now brought diplomatic pressure to bear on Japan, causing her, much to the disgust of the nation, to relinquish her conquests. In 1891 Russia had begun the construction of the Trans-Siberian railway, with the object of linking up her possessions in the Far East more closely with her European territory, and if circumstances were favourable, of wresting a further piece of country from China's feeble grasp. By 1895 the railway had nearly reached Lake Baikal.

It was at that time a cardinal item of Russian policy that the possession of an ice-free port on the open sea was essential to the national welfare, and this seems to have been turned to account by a group of leading men in Russia to induce the Government to take up the project of obtaining a harbour in Southern Manchuria. Japan, meanwhile, seeing in Russia's various manœuvres a direct threat to Japanese independence, commenced, in 1895, deliberately to prepare herself, both morally, physically, and politically, for a life and death struggle with her powerful competitor. The Government therefore began to familiarise the nation with the idea of war with Russia, and of self-sacrifice for the national welfare, and at the same time

further improved the condition of the armed forces, and looked round for allies.

1896. In 1896, Russia made another move in the game, when she obtained permission from China to run the Chinese Eastern railway direct from Chita to Vladivostock, instead of along the left bank of the Amur. In 1898 she went further, leasing from China Port Arthur, together with the southern portion of the Liao-tung peninsula. At the same time the construction of a branch railway from near Harbin was begun, which by 1900 had reached Port Arthur, though the line was but roughly laid, and was unballasted.

1900. In 1900 the late Dowager Empress of China, much impressed by the South African disasters of England, the power at that time most feared in Peking, determined to try and rid China of foreigners, and with this object fomented the so-called Boxer rising.

Russia at once seized the opportunity to occupy Manchuria for the purpose of protecting her railway, but later, in response to diplomatic representations, promised the powers to evacuate the Mukden province in October 1902, Kirin in the spring of 1903, and Tsi-tsi-har, north-west of Kirin, in the autumn of the same year.

Whilst these events were taking place, and the Japanese were perfecting their forces, the statesmen of Japan had in 1902. 1902 concluded an offensive and defensive alliance with Great Britain, under which it was agreed that if either nation were attacked by two powers the other should come to the aid of her ally.

Japan also entered into friendly relations with the United States, thus practically securing herself against the intervention of other nations in the forthcoming struggle with Russia.

In October 1902, Russia evacuated part of south-west Manchuria, but failed to carry out her promise in respect to the remainder of the province.

1903. At the beginning of 1903, General Kuropatkin, the Russian War Minister, made a tour of inspection in the Far

East, and as a result a viceroyalty was created which would bring the various provinces, commands, and garrisons, under the central authority of Admiral Alexiev, who was nominated Viceroy.

Incensed at Russia's breach of faith regarding the evacuation of Manchuria, and alarmed by the creation of a viceroyalty, which it was feared was but the prelude to an increase in Russian activity in the Far East, Japan in July 1903 began to negotiate for the redemption of the pledge to leave Manchuria. These negotiations ended in war in February 1904.

Though Japan was not perhaps quite ready for war in 1903, her preparations were so far advanced that hostilities could be commenced whenever diplomacy decided that the favourable moment had arrived.

Russia on the other hand was by no means so well prepared. The Trans-Siberian and Chinese Eastern railways, excepting the section round Lake Baikal, had indeed been roughly completed, the fortifications of Port Arthur had been strengthened, and the port of Dalny created.

The railways however were not yet capable of heavy traffic, and the forces in the Far East were numerically weak. The bulk of these had not even been organised into corps, there were but few cavalry or technical troops, guns were not plentiful, nor for the most part of the newest models, and lastly the troops were scattered throughout the territory in small garrisons. Moreover the diplomatic situation in Europe was not so favourable that Russia could afford to despatch to the Far East a tithe of her land forces.

Whether, from a military point of view, Japan should have declared war earlier, before for instance the railway to Port Arthur was completed, is for consideration.

If the moment was unpropitious in 1900, when the railway had reached Port Arthur, she might in 1902 after the conclusion of the alliance with England, have argued that Russia's preparations were likely to be proportionally less complete than her own, and pressure could have been put

on Russia, in October 1902, to carry out the promised evacuation of Mukden.

Possibly however the political atmosphere was less favourable in 1902 than was the case a year later.

Again it would seem that Japan would have been better advised to have declared war after the Manchurian and Korean ports were ice-free, than at the time she selected. True such policy might have added to the Port Arthur squadron four large cruisers from Vladivostock; but Russia would not have been allowed two months in which to collect troops before the first blow was struck on land, and Japan might, in these circumstances, have overrun Southern Manchuria, and captured Port Arthur, before Russian regiments had begun to arrive in any numbers.

It was however probably Russia's threat to increase her Far Eastern squadron, which caused Japan to precipitate matters and commence war in winter.

Russian
resources,

Possessed of almost boundless resources in men, and with a navy twice as large as that of Japan, it would at first sight appear that Russia must inevitably have crushed her opponent.

But complete accord between policy and organisation for war, as shown in the peace distribution of troops and in their power rapidly to mobilise when required, is as necessary to success as are great resources, otherwise defeat may be experienced before the resources can be developed, and Russia both in a military and political sense was not ready for the conflict even in 1903-4.

Encouraged by the success of an aggressive policy against other nations, Russia had apparently come to regard such procedure as infallible, but its inherent weakness became too soon apparent when attempted against a rival ready to fight for her rights.

The Russian forces in the Far East were inadequate to support her policy and secure her interests. The navy on paper was equal to that of the Japanese, but paper equality is not sufficient to command success in war, and the ships

which might have turned the balance were in Europe, many months' sail distant, and it might perhaps be impolitic to move them to the Far East.

Similarly the Russian land forces were many thousand miles from the main army, and this space could be crossed only in ships or by a single line of railway, ill laid, and moreover incomplete in the stretch round Lake Baikal.

In other words Russia did not possess the power of rapidly concentrating her forces in the localities where the contest would be decided, and her navy and army were therefore liable to defeat in detail.

In 1904, Russia controlled in round numbers a total of some 4,500,000 trained soldiers, of whom 3,500,000 belonged to the active army and reserve, 345,000 were Cossacks, and 685,000 National Guard. Russian Organisation

The period of military service was from the 21st-43rd year, of which eighteen years were spent in the active army and reserve, and the remainder in the National Guard.

The colour service was for four or five years, and thirteen years were passed in the reserve, during which period two trainings of six weeks were carried out.

The Cossacks, Finns, and the Christians of the Caucasus, served under special regulations, whilst Mahomedans were obliged to pay a sum of money in lieu of military service, but might volunteer to serve if they so desired.

- The field troops comprised the units of the active army brought up to war strength by reserves, and certain so-called reserve units, the cadres of which were maintained in peace, and filled up with reservists on mobilisation.

In time of war dépôt units were also formed of reservists and soldiers not physically fit or not required on mobilisation.

For garrison duty there were special fortress and local troops.

The National Guard was primarily designated for home defence, but was liable to furnish drafts for the field troops.

At the commencement of the war, there were, in Europe and the Caucasus, twenty-five active army and reserve

corps, in Russian Turkestan two corps, in Eastern Siberia two corps, and in the remainder of the empire a number of unallotted units. (Appendix I.)

Russian
training.

The Russian army was neither well trained nor well educated. It is said that even officers who had passed the staff college rarely studied their profession after the completion of their course, and that the regimental officers were ignorant of the theory of war.

The practical training also left much to be desired. The men were little practised in shooting, but were taught to rely on mass attacks and the bayonet to gain victory. Outpost and reconnaissance duties were neglected, and individual initiative discouraged.

All ranks were moreover steeped in the plausible fallacy of the advantages inherent in the occupation of defensive positions, and attached undue importance to the value of ground, and to a defensive attitude; yet, in actual practice, folds and features of ground were rarely utilised to the best advantage.

Generals immersed themselves in details, and interfered unduly in the instruction of troops and companies, to the detriment of the training, and to the limitation of their own power to handle large forces, grasp important situations, or deal with great issues. But serious as were the above faults they might have been partially overcome during the campaign had all ranks been inspired with the sentiment of patriotism and unselfish devotion to duty.

This was far from being the case. Even the officers openly expressed their indifference to the war, and the rank and file, though they fought well, and endured hardship with praiseworthy patience, went to the front unwillingly.

Japanese
Army

Very different was the attitude of the Japanese army.

Here every man was convinced that his utmost efforts were demanded to save the country from destruction, and the wonderful constancy of the Japanese soldiers was a more important factor in the national success than was even the bold generalship of the higher leaders.

In Japan every male between the ages of seventeen and forty was, in 1904, liable to serve in either army or navy, but military service did not, as a rule, begin until the twentieth year.

The army was organised as follows:—

Active army, service three years—180,000 men.

On working furlough for four years and four months—200,000 men.

Reserve army (or Kobi), in which men served for five years, with an organisation separate from that of the active army—200,000.

Conscript reserve, obligation for seven years and four months, or for one year and four months—trained men 50,000, untrained men 250,000.

National army of all men who had passed out of the other classes, and were less than forty years old—220,000, of whom about half had received training. (Appendix II.)

Of Japan's resources in shipping it is sufficient to note that her merchant navy had a tonnage of 650,000 and possessed between 200 and 300 steamers.

Japan was in a measure beholden to Europe for the training of her armies, for many Japanese officers had been and still are attached for instruction to certain European armies. It was however to the German army that the majority were sent, and the German model was therefore generally copied in both training, strategy, and tactics, though it is perhaps doubtful whether the Japanese peace training attained a really high standard.

Japanese
organisation.

Japanese
training.

The Japanese adopted the enveloping form of offensive war, but attacked with vigour at all points.

Their infantry, at the beginning of the campaign, advanced to the attack in relatively dense lines of skirmishers, whose movements were covered by both rifle and artillery fire. The infantry pressed on, in the usual manner, as close as possible to the enemy's line, and then either made whilst daylight lasted a series of assaults, prepared by rapid but somewhat wild rifle fire, and covered by storms of shrapnel

delivered from rather long range ; or more often attempted to win the position by night attack.

Though possessed of great tenacity of purpose, the Japanese appear to be slow thinkers and without the capacity of quickly adapting their minds and methods to circumstances. Plans once adopted were therefore carried out to the letter rather than in the spirit in which they had been conceived, and as a result it may fairly be said that the subordinate generals and regimental leaders did not direct their men with any particular intelligence, and that the latter did not fight much with their heads. The higher commanders were as a rule rather prodigal of their men's lives, and the soldiers, responding gallantly to the orders and example of their officers, often by their doggedness repaired mistakes due to excessive rigidity in tactics and generalship.

The cavalry was not well organised. Regiments were for the most part with divisions instead of being brigaded, and their employment was on a par with their organisation.

Military value
of the armies.

Striking a balance between the forces actually or potentially available on both sides, and having due regard to their military value, it may be concluded that the Japanese possessed over the Russians certain advantages of patriotism and training, and that larger numbers could in the first instance be placed in the field. Whether Russia would be able to redress the balance would depend on the rapidity with which Japan struck decisive blows.

III

AN empire exists only on sufferance which does not possess the power of free and well-developed inter-communication between its parts.

Two main lines of communication were available between Russia and her Far-Eastern possessions, the Trans-Siberian railway and the sea. Though possessing in the aggregate sufficient naval and military resources to ensure the defeat of Japan, Russia's double responsibilities in Europe and in the Far East had involved division of force, the bulk of the army and half the navy being stationed in Europe. Command of the sea.

Of the two lines by which force could be concentrated in the Far East, the railway alone was not in this crisis adequate to meet Russian requirements in the matter of transport. Sufficient force to ensure success could therefore only be transported to and maintained in the Far East if Russia also possessed the power of free movement by sea.

So long as she retained command of the sea, Japan, even if overwhelmed on land, could securely have retired to some Torres Vedras, and there awaited a favourable opportunity again to take the offensive. And even if Russia succeeded in driving the Japanese from the mainland, her conquest would have been of little value until she obtained the power to utilise the ports won in land battles.

Command of the sea, then, was vital to Russia.

Japan is an island empire, and though to some extent self-contained was not independent of seaborne commerce. The loss of power to control her maritime communications would moreover have put an end to her dreams of expansion, and would have exposed her to the danger of invasion.

Without naval supremacy Japan's armies could not easily

have reached the continent of Asia. Had they however after indecisive naval actions ventured on invasion of Manchuria, and had they been so far successful on land as to have driven the Russians to Lake Baikal before the question of supremacy at sea was finally settled, their eventual ruin would have been certain if the link binding the land forces with their island home was severed; for no large army could have been maintained in Manchuria with command of the sea irrevocably lost.

Apparently, then, naval supremacy, that is the power to control maritime communications, was for both sides the decisive factor, and each should have strained every nerve to attain this end, relegating other necessary operations to strictly subordinate positions.

Had Russia been able to concentrate her whole fleet in Far Eastern waters, Japan's position would have been one of great difficulty, but Russia had been obliged to divide her navy into two portions, and at the decisive point possessed no numerical superiority over her opponent.

Japan was therefore given an opportunity of beating the Russian navy in detail.

If the Russian Eastern detachment chose to meet the Japanese fleet in fair fight, so much the better for Japan, whose fleet was the more efficient. But if the Eastern detachment should elect to await in its harbours the arrival of the European squadron, it would be Japan's duty to take these naval bases and in this manner deprive the Russian fleets of bases of operation, and ensure the capture or destruction of all shipping lying in them.

Of the two military harbours, Port Arthur and Vladivostock, the former was most valuable, being free of ice in the winter. Whatever the relative merits of the two places Port Arthur was however of greatest importance to the Japanese, being at the commencement of hostilities the base of the larger portion of the Russian fleet (four large cruisers only were in Vladivostock) and after the naval surprise of 8th February its asylum.

It would seem then that the primary objective of the Japanese being to obtain the control of the maritime communications between Japan, Manchuria, and Korea, through the destruction of the Russian squadron based on Port Arthur, plans should have been made to secure the early capture of the fortress, since it was possible that the squadron would not quit the shelter of the harbour.

Japanese
objectives.

The occupation of Korea was also of importance, whence indirect protection could be afforded to the force detailed to besiege Port Arthur, for no Russian force moving into the Liao-tung peninsula could afford to neglect a Japanese army placed on or near the Yalu. The possession of Korea was from an economic point of view necessary to Japan, it would be a valuable asset when negotiations for peace were commenced, and until Dalny was taken no satisfactory harbours for landing troops existed except in Korea.

With command of the sea, Japan, if beaten in Manchuria or at Port Arthur, could perhaps maintain herself sufficiently long in the mountains of Korea to render Russia weary of the struggle.

Even without command of the sea, if the naval actions were indecisive, Japan, by using the islands in the Tsushima strait, might maintain a force in Korea, and might even, though this would be unlikely, prosecute the siege of Port Arthur from this base.

It is therefore thought that as was done Korea should as soon as possible have been occupied by the Japanese.

The capture of a fortress can be attained either by main force, or by starvation, the method employed being contingent on the necessity for the early reduction of the place.

No fortress can survive for long the defeat of the field forces of the nation, hence if the field armies are destroyed the capitulation of the national fortresses is only a matter of time.

Thus there were open to Japan two methods for the reduction of the Far Eastern naval bases of the Russian fleet. They could either be besieged, assaulted, and so captured,

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every effort being directed to the achievement of this result, and only sufficient troops diverted against the Russian armies to prevent their interfering with the besiegers; or one or both fortresses could be blockaded, whilst every man not required for this purpose marched against the Russian army.

The choice of alternatives hinged no doubt upon the issue of the first naval actions, but if, as was the case, these proved indecisive, it is believed that the former would have been the correct course, more especially in view of the possibility of the despatch of Russian naval reinforcements from Europe.

But whichever policy Japan elected to pursue, her utmost endeavours should have been devoted to one or other method of obtaining possession of the Russian naval bases.

There should have been no halting between two opinions, such policy tends to failure, and at the decisive point it is impossible to be too strong.

Japan's primary objective on land may have been the capture of Port Arthur, the field armies being intended to act as a covering force, though adopting active measures so as to rob the Russian army of the initiative. Possibly she undervalued the resisting power of Port Arthur, and the carrying capacity of the Trans-Siberian railway, and hoped to achieve the early capture of the fortress, and then victory over such forces as Russia might have deployed. Perhaps her army was in the circumstances deemed sufficiently strong to attain both objects. Again, the Japanese may have thought that in spite of the necessity for taking Port Arthur, the Russian troops in Manchuria must be attacked and beaten before the arrival of reinforcements from Europe rendered them formidable in numbers.

Whatever her reasons Japan in effect pursued a double objective, undertaking the simultaneous reduction of Port Arthur and the destruction of the Russian field armies. In the event therefore she possessed decisive preponderance of force neither in front of Port Arthur, nor in the field.

It may safely be claimed that the capture of Port Arthur was delayed for many months owing to the initial weakness of the besieging army.

On the other hand it is believed that had two or three extra divisions been detailed to besiege Port Arthur, this place would have fallen by assault after a few weeks' siege, and long before the Russians could have made really serious efforts for its relief, or could have assembled a sufficiently large army in Manchuria to give them the advantage in the subsequent campaign.

As to the field operations there is little doubt that but for the determination of the Japanese infantry, and the resolution of the higher commanders, the respite gained by Russia through the resistance of Port Arthur might well have proved fatal to Japan. Neither at Liao-Yang, nor at the Sha-Ho, did the Japanese possess sufficient force to gain decisive victories, and the cause of their weakness was the large number of troops that had been absorbed in the siege of Port Arthur.

The resistance offered by this fortress made these battles indecisive, and gave Russia time in which to collect so many troops that even after its fall the Japanese failed to gain a decisive victory at Mukden.

The plan actually adopted by Japan was an enveloping advance of three armies from widely different directions—the Yalu, Ta-ku-shan, and Dalny—on Liao-Yang, whilst a fourth army besieged Port Arthur. Japanese plan.

Converging operations though they menace the enemy's communications involve risk of defeat in detail even when, as in this case, the enemy's armies are not credited with a high standard of mobility. A convergent advance was however doubtless forced on Japan by the mountainous and inhospitable character of Southern Manchuria, where, owing to the absence of roads and local resources, some dispersion of force would have been necessary for purposes of supply, unless arrangements could have been made to forward supplies by sea to the armies as they advanced up the Liao Tung

peninsula, or for rapidly utilising the Port Arthur railway as it fell into her hands. Had the supply of the requirements of the whole field force from the few ports in the Liao Tung peninsula been practicable, which seems doubtful, or had steps been taken quickly to repair and provide rolling stock for this railway, the three field armies might have been deployed in the peninsula, and within easy supporting distance of one another. Under such dispositions the armies could however only have moved directly against those of the Russians, and their deployment would have been slow.

Having adopted a plan of convergent operations from separate bases, Japan's object should have been to exercise such simultaneous and vigorous pressure from all directions as to prevent concentration of hostile force against any one of her separated armies. At the same time every effort should have been made to attain tactical contact as soon as possible, by rapid but well-regulated advance on a common objective.

Russian
objects.

Russia's objects were naturally to a great extent the converse of those of the Japanese.

Japan wished for rapid and early success, whilst not only was time required by Russia for the collection of her scattered forces, but she must at all costs maintain possession of her naval bases.

Conversely if attacked by the Japanese the fortresses would gain time for the development of resources.

Whilst fortifying and provisioning Port Arthur and Vladivostock for lengthy sieges, Russia might therefore have prepared to manœuvre with the troops not required to garrison these places, so as to draw the Japanese armies on themselves and away from the fortresses. At the same time pending the collection of an army adequate to undertake the offensive, the Japanese, as opportunity offered, might have been harassed and exhausted by minor engagements, and attacked in detail if opportunities occurred.

Whether the Russian Eastern squadron should have

fought a decisive action with the Japanese, or awaited the arrival of the reinforcements, is a difficult question to answer.

The solution of the problem depended on the probable date when naval reinforcements from Europe might be expected. If likely to be long delayed the natural inclination would be to risk all in a decisive naval action, rather than lose moral and efficiency by remaining in port until forced to bolt out to avoid destruction at the hands of the enemy's land forces; or worse still passively await capture or annihilation.

Before the outbreak of war the strength of the Russian land forces in Manchuria appears to have been governed by the belief expressed by Admiral Witgeft, that having regard to the relative strength of the two fleets the possibility of a Russian reverse was a contingency not worth consideration. So sure indeed were the Russians of naval victory that the Eastern squadron was divided into two portions; four large cruisers being stationed at Vladivostock whence, on declaration of war, they were to harry the coastline of Japan whilst the remainder dealt with the Japanese fleet.

The Russian military general staff had nevertheless after a careful survey of the situation come to the conclusion that should Japan obtain control of the maritime communications in the Far East, she would, during the first period of the war, be in a position to employ on the mainland numbers considerably larger than those at the disposal of the Russians, for the strength of the Japanese permanent and territorial armies, with the depot troops required for their maintenance, was computed at 400,000 men. Russian plan.

It was supposed that the Japanese could take the field with ten or eleven divisions which might be employed either to occupy and secure Korea, where attack by the Russians would be awaited, or for offensive operations in Manchuria against Port Arthur, and in the Ussuri province against Vladivostock.

In the first contingency Russia could only passively await the arrival of reinforcements in such numbers as would enable her to take the offensive. In the second it was proposed to adopt the Fabian policy of avoiding decisive action until sufficient force had been assembled to permit of offensive operations with reasonable prospects of success. All troops not required for the defence of Port Arthur and Vladivostock, for the security of the railway, and for the maintenance of order, should therefore be concentrated in the area Mukden—Liao-Yang—Hsiu-yen, and whilst operating so as to delay the Japanese advance to the greatest possible extent, should gradually fall back on Harbin.

In the circumstances, which are not dissimilar to those that confronted the British in South Africa in 1899, the Russian plan was probably as satisfactory as any that could have been devised.

In practice, owing to the political difficulties attending the adoption of a frank policy of abandonment of territory, serious obstacles must be faced in executing such projects, whilst to harass and delay the enemy, and at the same time avoid decisive action, is the very reverse of simple, unless in possession of such superior mobility as the Boers held over the British.

IV

WHEN initiating in the autumn of 1903 the diplomatic pressure which finally resulted in war, Japan, practically secure through the British alliance from the interference of third parties, seems to have calculated that her navy was capable of beating the divided portions of the Russian fleet in detail, and that her army could cope successfully with any force that Russia could maintain in the Far East. Japanese calculations.

The confidence of the Japanese in their navy was fully justified. The unwise distribution of the Japanese land forces; the resistance offered by Port Arthur; the slowness of the Japanese military deployment and subsequent operations; the quantities of supplies obtained by Russia from Manchuria and Mongolia; and the unexpectedly efficient working of the Trans-Siberian railway, enabling Russia to place in the field a larger force than had been contemplated, all combined to upset Japan's other calculations. Japan was therefore obliged not only to augment her active army, but so to modify her recruiting laws as to enable greater masses of men to be placed in the field.

Trusting however in her power to beat Russia, Japan continued to press for Russian evacuation of Manchuria, until, on 6th February, 1904, negotiations were broken off, and diplomatic relations with Russia severed. (Appendix III.) February 1904.

On the same day the Japanese navy sailed to attack the Russian squadron at Port Arthur, a few ships being detached to destroy a couple of small Russian cruisers lying at Chemul-po, and to convoy a force of 2500 men destined to occupy Seoul, the capital of Korea.

By 3 a.m. on 9th the Japanese troops had landed without hindrance from the Russians, and the bulk were railed at once to Seoul. The next day the Russian ships were sunk when issuing from the harbour.

Meanwhile Admiral Togo had surprised the Russian squadron lying outside Port Arthur, and had torpedoed three of the largest ships.

Whilst these events were taking place mobilisation orders had been issued in Japan at 2 p.m. on 6th February to the Guard, 2nd and 12th divisions, and to the fortresses of Tsushima and Hakodadi.

The Japanese had originally intended to secure possession of Southern Korea at any rate, by landing the 12th division at Fu-san and moving it by march route eighteen stages to Seoul; and had already made arrangements for supply along the road.

After the first naval success it was however determined to use Chem-ul-po as the port of disembarkation.

In February the mouth of the Yalu, Ta-ku-shan, and Ying-kou are all ice-bound, and do not become clear of ice until the middle of March, so that the Japanese could not at that time have taken advantage of their temporary command of the sea by landing troops at those places.

Had they been able to do so, and had command of the sea been maintained, their lines of communication on land would have been shortened; but a large force would have been exposed to attack in strength whilst landing at Ying-kou, whilst a small force would have been isolated as well as exposed. Moreover transports sailing to Ying-kou must have passed close to Port Arthur.

On 14th February the 12th division railed to Nagasaki, where it embarked in six groups of transports, of which the first sailed at noon on 15th. By 22nd, the whole division had landed at Chem-ul-po, and a detachment had occupied Ping-Yang.

Simultaneously two regiments of the 4th division and two of the 2nd division were despatched to Chem-ul-po,

and garrisons placed in Fu-san, Ma-sam-po, and Gen-san. Mobilisation had meanwhile proceeded in Japan, and by 4th March the Guard and 2nd divisions had concentrated at Hiroshima ready to embark under the command of General Kuroki. March.

Early in March a detachment of the 12th division occupied Chin-am-pho, the port of Ping-Yang. On 10th March this harbour was reported clear of ice, and was therefore selected as the port of disembarkation for the Guard and 2nd divisions.

These troops were all on shore by 29th, the 12th division was well to the north of Ping-Yang, and An-ju had been occupied.

Information now reached General Kuroki that with the exception of 1500 to 2000 Russian cavalry no hostile troops were south of the Yalu.

The Japanese therefore pushed forward parties northwards both to bridge the rivers Che-chen and Tai-ing, to form supply depots, and to reconnoitre roads.

The result of this reconnaissance, which might with advantage have been taken in hand before the commencement of hostilities, was that all roads were found to be bad, and the coast road alone was reported fit for the movement of a large force. The whole country was moreover stated to be destitute of supplies.

In these circumstances it is for consideration whether Kuroki would not have been better advised to have marched only the 12th division towards the Yalu, sending the Guard and 2nd divisions northwards by ship at any rate to Yu-sa-pho and Ri-ka-ho, thus following the precedent of the Vimeiro campaign.

This course would have been less fatiguing and not accompanied by greater risk than marching, as was done, by detachments along one bad road, and valuable time would have been saved.

Probably, however, shipping was not available for the purpose.

April On 1st April, sufficient supplies having been collected at An-ju, Kuroki pushed on a force under General Asada to cover the establishment of depots of supplies at Yu-sa-pho and Ri-ka-ho. The Russians fell back without offering serious resistance, and by 4th Asada's cavalry had occupied Wi-ju.

The 12th and Guard divisions which were lying respectively a few miles north and south of An-ju marched northwards on 7th, throwing out towards Yong-pyong a weak flank guard, which was to halt there until the main body had passed An-ju, and then march to Chyang-Syong. The 2nd division which had been south of An-ju moved forward only on 11th.

The main body of Asada's force reached Wi-ju on 8th April, to find that the enemy had withdrawn to the right bank of the Ya-lu, and on 21st the army had concentrated near Wi-ju, whilst the flank detachment stood at Chyang-Syong.

During these operations, the 1st and 3rd divisions had on 1st April concentrated at Hiroshima, whilst the 4th division had mobilised and was standing at Osaka, and an artillery brigade of 108 guns was also ready to take the field. In April these divisions had been quietly embarked in a fleet of about eighty transports, which sailed without escort to Chin-am-pho as they were ready.

By the end of April the three divisions had concentrated at Chin-am-pho under General Oku.

Meanwhile war had been formally declared on 10th February, and the Czar had issued a ukase ordering the mobilisation of the troops in the Siberian military district, and in the districts of Perm, Viatka, and Kazan.

Between 9th and 12th February, most of the powers including China published declarations of neutrality.

Japan and Korea entered into an agreement on 23rd February, under which Japan, in exchange for the right to use certain places in Korea for military purposes, guaranteed the integrity of the country.

Admiral Makarov was given command of the Russian Far Eastern Squadron on 16th February, and on the same day the Viceroy transferred his headquarters from Port Arthur to Mukden.

On 29th February General Kuropatkin was appointed commander-in-chief in Manchuria, and General Linevitch in the Ussuri district, but both were under the orders of Admiral Alexiev, the Viceroy.

The Japanese had meanwhile made several abortive attempts to confine the Russian fleet in Port Arthur by sinking merchant vessels across the mouth of the harbour.

On 12th April, when cruising outside Port Arthur, the battleship *Petropavlovsk*, with Makarov on board, was sunk by floating mines, and another battleship injured.

At the end of April the Russians are said to have believed that the Japanese intended to destroy the Russian Eastern squadron, capturing its place of refuge, Port Arthur, if the Russians would not leave the harbour to fight a decisive naval battle on the high seas. At the same time the field armies were to advance to Harbin so as to isolate Vladivostok and the Pri-Amur province from the rest of the Empire.

One of the advantages inherent in command of the sea is that the enemy is kept in ignorance of the plans of the power possessing naval supremacy until they are actually in execution. During this period of uncertainty two alternatives were open to the Russians. They could place adequate garrisons in the fortresses, make arrangements to watch Korea and the coastline of Manchuria, and keep the remainder of their forces in hand, abandoning all attempts to safeguard territory or to interfere with the operations of the Japanese until the situation had become clear; or after placing garrisons in the fortresses, they could dispose the rest of the troops so as to attempt to secure Manchuria against invasion. Detachments of sufficient strength to embarrass the operations of the enemy would under this arrangement be posted on the most probable lines of invasion, a central force being held in reserve to operate as required.

It was the opinion of Kuropatkin that the military operations of the Russians at the beginning of the war must be conducted with great circumspection in order to prevent the destruction of the forces in detail.

Whilst holding fast to the two naval bases, the Russians must therefore above all things avoid the temptation to defend localities and positions possessing merely a local and ephemeral importance; and in order to obviate the equally serious risk of being forced to attempt the relief of Port Arthur with inadequate forces, should it be besieged, he proposed to strengthen the garrison at the expense of the field army.

Owing apparently to the opposition of the Viceroy Alexiev, who was averse to the policy of locking up a large proportion of the available troops in the fortresses, and at this juncture possessed a great but quite unwarrantable contempt for the military prowess of the Japanese, this proposal was not carried into effect.

Disregarding to a great extent the lines of the plans outlined by General Kuropatkin and the General Staff, the Russians in the end chose to disseminate their forces, their dispositions being calculated to secure Port Arthur and Vladivostock; to delay if not to check a Japanese advance from Korea, 19,000 men being placed near An-tung; and to hinder the operations of a force attempting to land at Ying-kou, 17,000 men being at that place and at Ta-chih-chiao. The coastline was watched so as to ensure the receipt of early warning of any intention to disembark at or near Ta-ku-shan or on the eastern shores of the Liao-tung peninsula; and a central force of 35,000 was retained at Liao-Yang and Mukden, whence it could be moved by rail to Ying-kou or into the Liao-tung peninsula to the relief of Port Arthur, but could not easily support the detachment on the Ya-lu (Appendix IV, Map 2.)

There are always grave political objections to the execution of a policy of bold abandonment of territory, but the detachment of such large forces as those placed on the Ya-lu

and at Ying-kou possessed serious military drawbacks. Not only were these dispositions contrary to the principle of concentration of effort, but such large detachments too often become compromised in the execution of their difficult task of delaying the enemy, and even if they escape disaster, their continuous and unavoidable retirement reacts unfavourably on the moral of the troops.

Again taking into consideration its position and climate, it may now after the event be urged that a smaller garrison would have sufficed for Vladivostock, though it is to be remembered that had the Japanese captured the fortress and subsequently advanced along the railway as far as Harbin, the Russians would have been forced to withdraw their field forces from Southern Manchuria.

Perhaps then it would have been better had the Russians whilst strongly garrisoning Port Arthur, and detailing a smaller force to Vladivostock, contented themselves with the despatch to such localities as the Ya-lu, Ta-ku-shan, and Pi-tzu-wo, of weaker but more mobile bodies of troops which while too weak to attempt decisive action could nevertheless have obtained information, and at the same time have considerably hampered the movements of the Japanese. The main body of the army might have been retained in some central positions such as Hai-cheng or Kai-ping whilst every effort was made to render it mobile.

From the dispositions of the Japanese armies at the end of April (Appendix IV, Map 2) it may be inferred that the intention had been in the first instance to secure and occupy Korea, then either to advance so far across the Ya-lu as to be in a position to menace the lines of communication of any Russian forces operating in the Liao-tung peninsula; or to transfer the bulk of the 1st army to a position directly covering the siege operations against Port Arthur. At the same time it may be supposed that the troops at Chin-am-pho were intended to assist Kuroki in his earlier operations, and when these had been completed to isolate Port Arthur and to secure the troops conducting the siege from interference.

Exactly how much was known by the Japanese as to the strength and dispositions of the Russians, it is not at present possible to state with accuracy.

The Japanese were credited with a good system of intelligence, whilst the Russians had been at little pains either to conceal their dispositions or the numbers of troops detailed to proceed from Europe to the Far East.

It may perhaps be assumed then that the Japanese were aware that on the Ya-lu were some 20,000 of the enemy; that the upper course of this river and the coastline as far as Ta-ku-shan were being watched by cavalry; that Port Arthur possessed a garrison of from 20,000-30,000 men, detachments from which were fortifying Nan Shan on the isthmus of Chin-chou, and were guarding the coastline of the Kuan-tung peninsula; that near Ying-kou was a considerable force; that there were numbers of troops near Liao Yang, say 20,000-30,000 men; and that the railway line from Harbin to Port Arthur was well protected.

At this juncture the Russians had in their favour all the prestige of their conquest of half Asia, and of more than a century of practically unchecked victory by Europeans over Asiatics. It would consequently have been of the first importance for the Japanese commanders to establish in the minds of their men, by an early and important success, a feeling of equality with if not of superiority over Europeans.

Kuroki, who was in touch with the Russians, should therefore have proceeded with such caution as to avoid the risk of even a minor reverse, but should have been prepared to strike boldly if an opportunity was offered of gaining victory.

The Russians had placed themselves behind a broad and unfordable river, and it is an established fact that rivers influence military operations mainly in that they delay the movements of the attacker, and during the passage afford the defender an opportunity of engaging the attacking troops in detail. On the other hand, when the defender has abandoned, as had the Russians, one bank of the river,

it is certain that to be in a position to take advantage of the opportunities afforded by a river line, the defending force must be mobile, and the communications along the river bank must be well developed.

Kuroki may be given credit for the knowledge that he possessed a numerical superiority over the enemy of between 13,000-15,000 sabres and bayonets, also that the communications on the Russian bank of the Ya-lu were but moderately efficient. There should consequently have been but little doubt as to the power of the Japanese to gain the passage without affording the enemy an opportunity of beating them in detail.

The direct attack of a defended river line is so difficult that it is rarely attempted. The passage is therefore usually gained by other measures; for instance, when the enemy's force is scattered, by such methods as feinting in several directions to mislead him, whilst the main body is thrown over at some favourable point. If the hostile troops are concentrated in one locality, the whole attacking force can avoid or turn their position, or it may be turned by a detachment whilst the remainder contain the enemy and then cross under cover of the detachment. Again the main body can turn the position whilst the enemy is contained by a detachment.

The Russian troops though disseminated in a tactical, being concentrated in a strategical sense in the neighbourhood of An-tung, one of the last alternatives could have been adopted by Kuroki.

Movement of troops on a large scale round the Russian right was probably out of the question owing to the impossibility of procuring shipping, there would therefore have remained the alternative of crossing the Ya-lu above Wi-ju. To have passed the whole of his force over the river above Wi-ju would have been attended by least risk, no serious fighting was likely to take place, but the difficulties of supply might have been grave, and the movements of the Japanese must have been slow. If two divisions had been

sent over the Ya-lu whilst one was left to contain the Russians, this division would have been secure from counter-attack owing to the presence of the river. In the absence of good roads the operations of the Japanese turning force would however have been so tardy as to have given the Russians ample time to escape, so that whilst the crossing would have been accomplished, the enemy would probably have been able to avoid defeat. Under the method of turning the position with a detachment whilst the main body held fast the opponents, the detachment would have been liable to defeat unless the operations were conducted with energy. Some risk however must always be run in war, and under this alternative the Russians, in the hope of defeating the detachment, might be drawn into battle with the whole Japanese force, when a Japanese victory would be probable. In the circumstances it may be concluded, then, that this last alternative would have been most advantageous to the Japanese.

It is said that in the first instance Kuroki had intended to gain the passage of the Ya-lu by sending the 12th division across the river in the neighbourhood of Chyang-syong, whence it could menace the communications of the Russian detachment by advancing on Ai-yang-cheng.

When this plan had been made the Japanese commander received an intimation that his army was not to leave the vicinity of the Ya-lu until the force under General Oku, which was destined to land in the Liao-tung peninsula, had begun its advance on Liao Yang. This it was estimated would be towards the middle of June.

Unwilling to risk separation from one of his divisions for so long a period as one month in face of an unbeaten enemy, Kuroki now resolved to pass all three divisions over simultaneously and on a wide frontage, but lack of bridging material caused the abandonment of this project.

Finally it was decided that the 12th division should cross

above Wi-ju and cover the others who would pass over near that town, when all would simultaneously attack.

The operation was carried out with success on 1st May. May.

The next question is what should have been Kuroki's procedure after the battle of the Ya-lu. Actually he had been directed to advance to a point half-way between An-tung and Feng-huang-cheng, intrench, and wait until the 2nd army was ready to advance up the Liao-tung peninsula.

His object was now presumably so to manœuvre as to distract the attention of the Russians from the operations of Oku, without incurring undue risk to the 1st army.

No danger would have been incurred had the Japanese remained at An-tung, for it was unlikely that the Russians in force would have ventured so far south to attack them. By staying at An-tung Kuroki would not however have contained any large number of Russians, who would therefore have been free to operate against Oku.

It would seem, then, that Kuroki should have made a forward movement so as to impose on the enemy, advancing perhaps as far as Feng-huang-cheng. At the same time a bridgehead on which he could fall back might have been made at An-tung.

Kuroki did advance, but not until 10th May, supply difficulties and the necessity for tapping an area where transport could be obtained—little transport was available at An-tung—being strong motives for the forward movement, as well as the desire indirectly to assist the disembarkation of another Japanese force at Ta-ku-shan.

On 3rd May, probably to cover the sailing of the transports of the army under General Oku, the Japanese again attempted to block up the mouth of the harbour of Port Arthur.

On the same day, guarded by a few gun and torpedo boats, and preceded by a naval landing party, the first group of sixteen vessels, containing the 3rd division, was able to sail for the selected landing-place Hou-tu-shih, a few

miles south of Pi-tzu-wo, where the Japanese force which captured Port Arthur had disembarked in 1894. Hou-tu-shih though reputed to possess superior accommodation to Pi-tzu-wo was by no means an ideal port. The foreshore was shallow, muddy, and of considerable extent, piers and quays were non-existent, and the place was exposed to easterly winds, though somewhat sheltered by the Elliot islands. On the other hand the distance from Port Arthur (fifty to sixty miles), the nearest point where the Russians were in force, was sufficient to reduce to small proportions the risk of serious opposition to the landing operations; and transports coming from Japan need not pass close to the Russian warships, as would have been the case had a landing been effected on the west coast of the Liao-tung peninsula.

On 4th May the ships sighted Hou-tu-shih, where a few Cossacks were observed. The weather was however too rough to render landing practicable, so the Japanese seem to have sailed to the Elliot islands where a shallow haven, protected by a boom against a Russian torpedo-boat attack, had been selected as night anchorage for the vessels.

It was hoped that even if the enemy's torpedo boats damaged the transports when at anchor the passengers could easily be saved in the shallow water, whilst the cargoes would without much difficulty be salvaged.

On 5th the disembarkation commenced, the naval covering party being first put ashore, then a battalion, then more infantry and some cavalry. Pi-tzu-wo was now occupied, the few Russians in the place retiring northwards; a detachment too was despatched to Pu-lan-tien to cut the railway, but was content merely to skirmish with the small Russian garrison.

By 16th May, though the field hospitals and supply and ammunition columns had not landed, General Oku was able to march the 3rd division towards Chin-chou, whilst the 1st and part of the 4th division had taken up a position at Pu-lan-tien, and along the Ta-sha river, facing northwards.

Between 15th and 23rd May the 5th division and the

1st cavalry brigade arrived from Japan, and the trains of the 1st, 3rd, and 4th divisions were landed, together with half of an artillery brigade. Meanwhile to prevent the despatch of a force from the north to attack General Oku's troops whilst engaged in the work of disembarkation, a naval demonstration was made in the neighbourhood of Kai-ping.

General Oku issued orders, on 21st, for the 1st, 3rd, and 4th divisions to advance to Chin-chou, where a force estimated at about 10,000 Russians was known to be holding a strongly fortified position. The 5th division, with detachments of the 3rd and 4th divisions, and the 1st cavalry brigade, was meanwhile to hold the line Pu-lan-tien and the Ta-sha river.

On 26th Chin-chou was captured, and on the same day some 16,000 Russians were driven from Nan-shan.

The 11th division disembarked at Yen-tai between 20th and 31st May.

By 29th Dalny, Ta-lien-wan, and Nan-kuan-ling were occupied.

The 1st and 11th divisions were now, with some Kobi brigades which were coming to the front, constituted into a 3rd army, under General Nogi, for the siege of Port Arthur.

The 3rd, 4th, and 5th divisions, with the 1st cavalry brigade, and the 1st artillery brigade, were at the same time grouped into the 2nd army under General Oku.

For several days the troops at Pu-lan-tien had been skirmishing with some Russian horsemen supported by artillery, and as these were thought, by the Japanese, to be possibly the advanced guard of a larger force, the 3rd and 4th divisions and the half artillery brigade were moved to Pu-lan-tien on 2nd and 3rd June.

On 19th May the 10th division, forming the nucleus of the 4th Japanese army, had begun to disembark at Ta-ku-shan, under General Kawamura.

Kuroki on 10th May advanced the main body of the

1st army to Feng-huang-cheng, detaching on 28th a brigade of the 12th division to Ai-yang-cheng.

Some inference as to the general intentions of the Japanese could now have been made by the Russians from the dispositions of the Japanese forces (Map 3), the landing of troops at Ta-ku-shan showing that active measures were to be taken against the Russian army, whilst from the arrangement of the forces the operations were almost bound to take the form of a concentric advance.

Since the three Japanese armies would be liable to defeat in detail until they arrived within tactical supporting distance of one another, it might also be inferred that the forward movement would be prosecuted with energy.

It has been remarked (page 23) that the strategical deployment of the Japanese field forces was probably conditioned to a great extent by the limitations imposed by the topography of Southern Manchuria on the concentration of large numbers in any one locality.

It is now for consideration whether the Japanese deployment in the form of two strong wings with a connecting force in the centre, was the most suitable that could in the circumstances have been made. If it may be assumed that one of the principal objects of Japanese strategy was to safeguard from interference the force besieging Port Arthur, it is evident that the largest numbers possible should have been so disposed as to be able to offer direct opposition to Russian attempts to relieve the place. The Japanese would therefore have been faced with the problem as to the largest numbers that could be maintained on the roads leading up the Liao-tung peninsula.

Even if it may be taken for granted that troops could to some extent have been supplied from the coast, it is difficult to see how a larger force than that actually allotted to the 2nd army could have been maintained in this area, and this force may be taken to represent the maximum that could successfully have operated in Liao-tung.

The next question is whether the remainder, or at any

rate the major portion of the remainder of the field armies, should not have been concentrated on the roads leading from Ta-ku-shan via Hsiu-yen, where the troops would have been well placed to support or be supported by the 2nd army.

Whether such large numbers could have been maintained on this line of advance is doubtful, but apart from this the size of the force detailed to operate from Ta-ku-shan would depend on the decision to use or neglect the routes leading from the Ya-lu.

The direction followed by these roads was such as to enable an army using them not only to menace the communications of all Russian forces lying south of Liao Yang, but to bring it directly on to the flank of a Russian force offering battle at this city. At the same time the communications of all Russian troops operating eastwards from Liao Yang would be open to attack from the direction of Ta-ku-shan and Port Arthur.

On the other hand until the Japanese armies had advanced inland some distance, the troops moving from the Ya-lu would be isolated, and exposed, before the other armies could intervene, to the risk of disaster at the hands of the main force of the Russians, who owing to this fact and to the menacing position occupied by the Japanese right wing might be tempted to attack it.

It would seem then that if any troops were placed on the roads leading from the Ya-lu the advantages would be greatest and the risks not unduly great if the force was large.

A strong centre, and if necessary a weak right, composed of troops who could not be maintained in the centre, would constitute a less hazardous arrangement. The centre and left would be able more effectively to support one another, whilst the weak right, though perhaps tempting to attack, would probably be ignored by the enemy, and if attacked and beaten its defeat would not exercise a vital influence on the operations of the remainder.

Against these dispositions it may however be argued that the troops in the centre and on the left would not be well placed to achieve decisive results from a successful action near Liao Yang, and it may therefore be concluded that little fault can be found with the deployment of the Japanese field armies, for the undoubted advantages outweighed the possible dangers of their formation.

It has been suggested that, under the original Japanese plan of campaign, the 1st army was intended to move on Hai-cheng, and not towards Liao Yang, and that the primary object of the Japanese leaders was to concentrate their own forces rather than to envelop the Russians. The direction actually taken by Kuroki's army is ascribed to the influence of topography, and to the fact that the only practicable roads from the Yalu to the Liao converged on Liao Yang.

In 1895, the army which crossed the Yalu did march on Hai-cheng. It appears, then, that if the Japanese had desired Kuroki's army to move on Hai-cheng, sufficient roads would have been available for the purpose. It is probable, therefore, that the Japanese deliberately moved the 1st army by the more northerly routes, with the object both of preventing Russian operations towards Port Arthur, and of keeping the 1st army in a position from which it could envelop the Russian left in any locality south of Mukden. No doubt it was calculated that the Russians could not quickly overwhelm Kuroki in the hilly country lying south-east of Liao Yang, and that the attraction of Port Arthur, and the presence of the other two armies, would tend to lessen the probability of such a counter-stroke. Possibly the Japanese hoped, after the rapid capture of Port Arthur, to apply to the Russians the enveloping tactics attempted at Mukden, the 3rd army forming the left wing, the 1st standing in a more favourable position than was their right on that occasion.

After the battle of the Yalu, the Russians, engrossed, as was the case throughout the campaign, in contemplation

of their own dangers and difficulties and not those of their enemy, became, owing to the movement of a Japanese detachment towards Sai-ma-chi, seriously alarmed for the security of their line of communication in the area north of Liao Yang. Troops under Rennenkamf, amounting to a Cossack brigade, 2500 infantry, and two horse batteries, were therefore pushed to Sai-ma-chi, and at the same time two or three battalions from Liao Yang began to fortify the passes near Lien-shan-kuan. Another Cossack brigade, under Mischenko, was also sent to watch the coastline near Ta-ku-shan.

Madridov, who was still on the upper Yalu, made on 10th May a raid into Korea against the Japanese line of communications, attacking An-ju, but was easily beaten off by its garrison of less than a hundred men.

During the remainder of May no incident of importance occurred except a few Russian reconnaissances from Sai-ma-chi.

The security of Port Arthur had however caused anxiety to the Viceroy, whose somewhat sanguine estimate of its powers of resistance had so far changed to one of despondency that on 25th April he issued general instructions to Kuropatkin that when the fortress was attacked, the field army must advance to its support rapidly and with energy.

On 19th May these instructions assumed a definite form, Kuropatkin being directed to take active measures for the relief of pressure against Port Arthur, either by attacking Kuroki, or whilst containing Kuroki by marching against the force under Oku which had landed near Pi-tzu-wo. Two days later a further suggestion was made that whilst leaving a screen of troops on the Feng-shui-ling and a reserve at Hai-cheng, the remainder of the field force should attack General Oku. Kuropatkin spent some time in consideration of instructions so foreign to his own views, hoping perhaps that the chapter of accidents might come to his assistance in the shape of a Japanese reverse at Nan-shan.

On 27th May, the day following the defeat of the Russians at Nan-shan, he however seems to have given way, for he informed Alexiev that offensive operations would be undertaken against the force under Oku.

The augmentation of the Russian army had, meanwhile, been proceeding, and towards the end of May the field forces had reached the respectable total of about 100,000 bayonets and sabres (Appendix V, and Map 3).

At this juncture the strength of the Japanese force under Kuroki was estimated to be three divisions and three Kobi brigades; the 2nd army to comprise three divisions, whilst a large force was believed to be in the neighbourhood of Ta-ku-shan; the grand total amounting to perhaps between 80,000-100,000 fighting men.

The main question to be decided before commencing any operation of war on a large scale is whether the results are likely to be decisive; if not the venture will rarely be worth undertaking. The attempt may even prove disastrous, for if a leader plays for lower stakes when the enemy is aiming at decision, he stands to win pence and to lose pounds.

Risk there must be in all ventures, but it is safe to say that where gain will be greatest risk will be least, for this situation implies that the blow is to be struck at some point vital to the enemy, and as such blow must be parried, the enemy will be obliged to conform to the operations of the attacker.

Kuropatkin's first consideration should therefore have been, which, if either alternative, would lead to decisive results.

From this point of view he made a correct selection in deciding to attack General Oku, for though the defeat of General Kuroki might have delayed the Japanese operations, their plan of campaign would not have been ruined. Moreover to have reached the 1st army at all would have been a slow and difficult business, having regard to the mountainous nature of the country lying south-east of Liao Yang, and to the deficiency of transport under which the Russians

were labouring. Effective counter attack by the 2nd army which would force the Russians to abandon their plans and conform to the movements of the enemy was therefore to be feared; and lastly, the Russian army possessed neither the special training nor armament required for mountain warfare.

By crushing Oku the Russians would not only in all probability have paved the way for the destruction of the larger portion of the Japanese army, but would have reopened the road to Port Arthur, and perhaps saved the Russian fleet. Besides an advance by Kuroki would owing to the nature of the country be so slow that before a serious menace could be offered to the Russian communications Oku might have been beaten.

Having determined to strike at Oku, the next point for decision should have been in what force the operation was to be undertaken.

Here again it should only have been necessary to follow one of the great principles of war, and to strike with every available man, cutting down necessary detachments to the lowest possible limits. The difficulty in war is however to determine what is the lowest margin of safety, and Kuropatkin was set no easy task to decide how many men would be required to deal with Kuroki and Kawamura, and how many to secure his line of communication against Japanese forces which might be landed at Ying-kou, or even at Shan-hai-kuan.

Lastly, assuming that the Russian general decided to march southwards with the bulk of his troops, he must weigh the all-important questions of transport, supply, time, and space, to discover whether his plan was really capable of execution.

It is an axiom that continuous pressure on the enemy is the very soul of the convergent system of strategy, which depends greatly for its success on the maintenance of simultaneous pressure on the enemy from the various directions in which the army is moving.

It was to be expected, then, that the combined forward movement of the Japanese armies would be vigorously prosecuted, and that if any army were attacked the others would at once advance against the Russians to relieve it.

It is therefore clear that, as in all operations of war, the probability of success would be greatly increased if the Japanese were kept in ignorance of the Russian projects up to the moment of decisive attack on Oku.

The adoption of a defensive attitude towards the 1st army and the force at Ta-ku-shan, while an attack was made on Oku, would however have given the Japanese an indication as to the Russian plan. Whilst troops were marching against the 2nd army Kuroki and Kawamura must therefore be led to believe that they were also about to be attacked. Finally, a simultaneous offensive must be undertaken against the three armies, though only pressed home against Oku, and the garrison of Port Arthur must sally against the investing forces.

Oku too must not be permitted to discover that the decisive blow was about to fall on his army lest he should fall back on Nan-shan, whilst the others moved forward against the Russian communications.

Keller who had superseded Zaslitch, and Rennenkamf, had between them in the neighbourhood of Lien-shan-kuan and Sai-ma-chi some 25,000 sabres and bayonets, opposed to Kuroki's detachment, thought to number about 50,000; and Mischenko at Hsiu-yen could muster about 7000 sabres and bayonets against Kawamura's force, which might consist of one or more divisions. Having regard to the nature of the country in which the operations were to be conducted, Keller and Mischenko should therefore have been able to contain the 1st army and 10th division, whilst a decisive blow was struck at Oku.

If a brigade, i.e. 5000-6000 men, were left at Ying-kou, where it was perhaps still possible that the Japanese might attempt to land a force with the object of surrounding and cutting off all Russian troops operating against Oku, and a

force at Kai-ping, to secure this place against a naval raid, the remaining troops, less depots, and small garrisons of, say, half a brigade, in all, at Liao Yang and Mukden, would have numbered some 60,000 sabres and bayonets.

With these Kuropatkin could have moved against Oku, whose army was estimated at three divisions, or some 36,000 sabres and rifles.

Possibly, had he displayed energy, Kuropatkin might, with the help of the railway, have collected this force at Wa-fang-tien in a fortnight, that is during the first week in June, when Oku would probably have been in the neighbourhood of Pu-lan-tien, if not farther north.

It is thought, then, that had he acted in whole-hearted fashion, Kuropatkin might towards the beginning of June have taken the offensive with fair prospects of success. But the Russian general, perhaps with the object of hazarding as few troops as possible, especially after a demonstration made by a Japanese squadron in the neighbourhood of Kai-ping on 7th and 8th June, was content to adopt a half-measure, and even this was not carried out until after ten days' further delay.

On 5th June part of the 1st Siberian Corps was railed June. to Te-li-ssu, on 7th a memorandum was addressed to General Stackelberg, to whom had been confided the command of the force. In this he was directed to advance southwards with the 1st Siberian corps and other troops, so as to create a diversion in favour of Port Arthur, by drawing against his detachment as large a Japanese force as possible, but was warned that he was not to become entangled in a decisive action against superior forces.

Kuropatkin however immediately countermanded the movements of a portion of the troops, owing to a display of activity by the 10th Japanese division, and it was not until 12th June that Stackelberg was allowed to issue the orders necessary to complete the concentration of his force. Eventually, some 27,000 bayonets, and 2000 to 3000 sabres, were massed at or near Te-li-ssu.

The Russian cavalry had meanwhile retired on Te-li-ssu when the 2nd army moved to Pu-lan-tien, but had again advanced to Wa-fang-tien on receiving from Stackelberg a reinforcement of two battalions.

Early in June the Japanese heard, both from local spies, and from their intelligence service in Europe, that the Russians were about to attack Oku.

Their armies were standing on an extended frontage, and not one of the three was sufficiently strong to cope successfully and unassisted with the largest force the Russians could move against them. The configuration of the theatre of war and the disposition of the armies however gave them, as has been pointed out, this advantage, that if either flank was threatened the remainder by direct advance could menace the line of communication of the troops with which the Russians assumed the offensive. The reply of the Japanese to the impending attack on Oku should therefore have been an immediate offensive by the forces under Kuroki and Kawamura.

Whether Oku should have retired, halted, or advanced, is the next question. Had he fallen back before the enemy, or remained stationary, a large body of Russians would have been inveigled far into the Liao-tung peninsula, and an opportunity afforded to Kuroki and Kawamura to interpose between it and the rest of the Russian army.

In war it is however never possible to rely on information, nor safe to count even on probabilities, and though every indication pointed to the likelihood of an attack on Oku, these rumours and movements might have been only a ruse to distract attention from other operations which would have been facilitated by the inactivity of the 2nd army. Besides the object of the Japanese was to concentrate, not separate their armies, and above all the initiative must not be allowed to pass to the enemy. It is thought, then, that a simultaneous advance should at once have been undertaken by the three armies, which would have assured the possession of the initiative.

This, subject to the limitations imposed by difficulties of maintenance, was apparently the intention of the Japanese General Headquarters.

On 2nd June Kawamura was ordered to hold himself in readiness to advance towards Kai-ping and menace the flank of any Russian troops in this neighbourhood, whether or not his division had completed its disembarkation. At the same time Kuroki was ordered to send to Kawamura a force under General Asada of one brigade, two squadrons, and two batteries, with which Kawamura wisely decided to deal a blow against Mischenko before attempting to move on Kai-ping.

Asada left Feng-huang-cheng on 6th June, and on 8th he combined with part of the 10th division in a successful attack on Hsiu-yen, which temporarily disposed of Mischenko. As the Russian operations now seemed to be hanging fire, in point of fact Kuropatkin, as has been narrated, had countermanded the movement of part of the force designated to advance against Oku, Japanese General Headquarters issued orders postponing the projected movement on Kai-ping. Kawamura therefore halted and intrenched, and on the news of this development Kuropatkin allowed Stackelberg to continue his concentration on Te-li-ssu.

On 12th, Oku being ready to move from Pu-lan-tien with three divisions and the cavalry, Kawamura was directed to proceed towards Kai-ping, as soon as he could do so, leaving Asada to protect his right and watch Hsi-mu-cheng.

Orders were also issued for a forward movement by the 1st army, but owing to supply difficulties Kuroki was only able to push forward some detachments, whose operations combined with news of the westward march of Asada's brigade caused Keller to fear an attack on his right. He therefore began to mass troops on this flank, and to push reconnaissances southward.

Meanwhile Oku had commenced his march from Pu-lan-tien, and by 13th, the 3rd and 5th divisions were, with the

artillery brigade, at Wa-fang-tien, the 4th division near Fu-chou, and the cavalry brigade on the right flank. The 6th division, though part had disembarked, was not yet ready to advance.

Even the threat of an offensive had therefore, though they probably did not know it, already proved advantageous to the Russians, for the Japanese had been obliged to push forward any troops that were in position to move, and as matters stood either Kawamura or Oku could have been attacked without risk of intervention by Kuroki (Appendix VI, Map 4).

On 15th June the Japanese defeated the Russians at Te-li-ssu, driving in their right, but did not follow up the success with any vigour—in fact there was practically no pursuit—and Stackelberg's detachment was able to fall back quietly on Kai-ping, covered by a cavalry force under Samsonov.

Kuropatkin now hastened all available troops southwards, even withdrawing a brigade from Keller's detachment to strengthen the force south of Liao Yang, and a defensive position was selected and fortified in the vicinity of Ta-shih-chiao.

At the same time Keller was ordered to make a demonstration against Feng-huang-cheng, reported to be occupied by the 2nd and Guard divisions, an operation which, whilst it might certainly have caused anxiety to the Japanese as to the safety of the 1st army, would have produced results exactly contrary to what apparently were desired had the 2nd and 4th armies been directed to advance and relieve pressure against Kuroki.

Having mustered eight battalions Keller advanced in two columns and reached a point ten miles from Feng-huang-cheng unopposed. He then retired, and on arriving at Lien-shan-quan, on 18th June, received orders to remain on the defensive.

No sooner had Keller withdrawn, than Rennenkamf attacked Ai-yang-cheng, reported to be held by the 12th

division, but drew off without discovering the strength of the enemy's force.

The two Russian generals seem to have acted independently, thereby reducing the chances of success.

The Russian fleet now showed signs of activity, putting to sea on 23rd June, but was driven back into the harbour by the Japanese. On 26th June the 3rd army captured a ridge known as Ken-shan, about ten miles from Port Arthur, subsequently repulsing several attempts to retake the position.

At about this time the 3rd army was reinforced by the 9th division and 4th Kobi brigade, and an artillery brigade.

The victory of Te-li-ssu having for the moment placed the initiative in the hands of the Japanese, they were able to pause to complete their arrangements for a sustained advance.

It was at first proposed that Kawamura should attack the passes near South Feng-shui-ling on 26th June, by which date it was computed that the 2nd army would have reached Kai-ping.

On 24th June Kawamura, in common with the other Japanese commanders, was however notified that as the Russian fleet was still in condition to put to sea and render sea transport of supplies precarious, the combined advance on Liao Yang must be delayed until after the end of the rainy season, that is until September. Thus the Japanese had already begun to feel the drag on their operations of the fortress of Port Arthur, which was sheltering the Russian fleet, and proposed to abandon the initiative, a step likely to be fraught with serious consequences in view of the dispersion of their forces.

By this development Kawamura was placed in an unenviable dilemma, for his detachment lay isolated and exposed close to the passes over a main range held by a hostile force which he was aware had been recently reinforced, but over whose operations he could exercise no surveillance.

In these circumstances there were open to him three alternatives: advance, inaction, retreat.

Inaction which would leave his force in its disadvantageous situation, with the prospect of future operations against a more strongly fortified and garrisoned position, may at once be discarded.

Retreat was undesirable from both moral and tactical points of view, for the men would be discouraged, the division would abandon territory already conquered, and though the difficulties of supply might be reduced the power to intervene effectively on behalf of the other armies would practically be abandoned.

There would have remained the policy of attack, and in favour of this it might have been argued that no better opportunity of capturing the passes was likely to occur. Moreover, though the maintenance of the force might present difficulties, and some risk would be run of counter attack, the troops would at any rate be well placed, when holding the passes, both to resist attack and to screen their own strength and movements, whilst observing those of the enemy. Finally they would be in the most favourable situation to assist the other armies in case of need, and to co-operate when the time came for a general forward movement.

Kawamura decided, and it is thought rightly, to attack, and by 27th had taken the South Feng-shui-ling. The Japanese then halted and began to intrench.

On 22nd June Kuroki had been informed by the Japanese General Headquarters that as a concentric advance on Liao Yang would shortly take place, a depot of supplies was to be pushed forward to Tung-yuen-pu, under guard of a detachment. Judging that such policy would be too hazardous Kuroki resolved to move his whole army forward, and the troops were actually on the march when the order of 24th postponing the movement on Liao Yang came to hand.

The Japanese are not quick to adapt themselves to

changed conditions, and Kuroki was probably aware that, Kawamura intended to occupy the Feng-shui-ling. He therefore determined to continue his operations, seizing the Mo-tien-ling and neighbouring passes with the object, though drawing nearer to the enemy's masses, of limiting the Russian power of manœuvre, and of obtaining information. The army moved in three columns, owing to the mountainous nature of the district, the Guards marching on Erh-chia-pu-tsz, the 2nd division on Lien-shan-kuan, and 12th division by Sai-ma-chi. Before this advance Keller and Rennenkamf fell back, so that, by 27th, the Guard and 2nd divisions were holding the Mo-tien-ling and neighbouring passes, and the 12th division a pass twelve miles west of Sai-ma-chi called Pa-li-ling.

Having obtained possession of the roads over the Mo-tien-ling area Kuroki relapsed into inactivity, due in part to heavy rain, which quite disorganised his arrangements for supply.

At this juncture the information available to the Russians caused them to credit the 1st army with a strength of only three Kobi brigades at Mo-tien-ling, whilst the 12th division was believed to be at Sai-ma-chi.

On the other hand, the bold movements of Kawamura and the presence of Asada's detachment with this force led to the belief that it consisted of no fewer than four divisions under the command of Kuroki.

Kuropatkin, fearing that the Japanese meditated an advance from the South Feng-shui-ling against Hai-cheng, therefore at once swept up all available troops to oppose them, collecting near Hsi-mu-cheng a composite force of no fewer than 30,000 sabres and bayonets, from units of the 2nd division 4th corps, from the 5th East Siberian, and 31st and 35th divisions, and from various Cossack regiments. As the Japanese made no further movement forwards the troops from the 31st division were however soon afterwards sent back to Hai-cheng, and now the Russian commander-in-chief, thinking apparently that Keller's

detachment had been dangerously weakened, returned two regiments to him (Appendix VII, Map 5).

Early in July Kawamura was notified that the advance of the 2nd army was about to be renewed, and this information seems to have been accompanied by a suggestion that the 10th division should march westwards so as to co-operate in the movement.

Confronted as he was by so large a force of Russians, Kawamura judged that such operations would be hazardous, for he feared that on hearing of his departure the Russians might at once advance and attack Asada's brigade. He therefore contented himself with the despatch of two weak detachments towards Kai-ping, to establish touch with the forces under Oku.

On 12th July the 10th Kobi Brigade, which had begun to arrive at Ta-ku-shan as early as 24th June, reached Hsiu-yen to reinforce Kawamura's detachment, and on 16th General Nodzu took over command of the troops, now constituted the 4th army.

Rumours of these movements having reached Kuropatkin, he seems to have resolved to clear up the situation by means of an attack on Mo-tien-ling by Keller's detachment, which had been augmented by the 1st brigade, 9th division, recently arrived from Europe, and by three battalions from Rennenkamf, in all about 8000 bayonets. Rennenkamf had at the same time received the 2nd brigade of the 9th division, eight battalions strong, as reinforcement.

The information desired by Kuropatkin could, broadly speaking, be attained either by cunning or by force; that is by such expedients as secret-service agents and special patrols, or by reconnaissance in force, or attack on one or all of the Japanese armies.

It is a maxim that no military operation on a large scale should be undertaken unless the results are likely to be decisive, and it cannot be urged that the results of a reconnaissance in force promised to be decisive to the Russians, except in an unfavourable sense, that is to say the recon-

noitring force might be opposed by overwhelming numbers, of the enemy and suffer disastrous defeat.

If secret-service agents, officers' patrols, and minor reconnaissances had, as was apparently the case, been tried without success, the only remaining alternative would have been attack on one or all of the enemy's armies on a grand scale, though to have made such attack when in ignorance of the enemy's dispositions would have been a hazardous venture. It would however have been attended by some prospects of advantage, whereas none were to be expected from a reconnaissance in force.

Attack in force on the passes at and near Mo-tien-ling might have ended in disaster should the Japanese really have proved to be holding them with no more than three brigades, for the troops at South Feng-shui-ling might, by a rapid advance, succeed in interposing between the Russians and Liao Yang.

Advance in strength against the 2nd army would have been too perilous, for it was far away, and the weak detachments which could have been left to hold off Kuroki and Kawamura might well have found that they had neither strength nor space to manœuvre necessary for this purpose.

A third alternative would have been attack on the forces holding the South Feng-shui-ling, estimated, as has been pointed out, at about 45,000 men.

For this there would have been available the 30,000 troops already in this neighbourhood, the bulk of the 10th corps, which reached Liao Yang during the early portion of July, and could not be less than 20,000 strong, besides some 15,000-20,000 men at Ta-shih-chiao and Hai-cheng—that is about 65,000 men.

To contain Oku there would have remained quite 30,000 in position at Kai-ping, whilst Keller and Rennenkamf would still have disposed of nearly 20,000, wherewith to hold off the 1st army, believed to number about 25,000.

Against this project it may be urged that victory, if gained, though important, might not have been decisive;

whilst if success was not rapidly attained, the Russians might—though of this there could have been no great likelihood—be enveloped by the advance of the Japanese wings. Again, both here and at Mo-tien-ling the Russians would have been operating in mountainous districts, for which their organization and armament was ill adapted.

Actually a reconnaissance in force was made when Keller, on 17th July, attacked the Japanese positions at and near Mo-tien-ling with about eighteen battalions, drawing off when the positions were found to be held in strength.

The result of this reconnaissance was to cause the Russians to revise their opinions as to the dispositions of the Japanese armies, and it seems now to have been more correctly believed that Kuroki, at Mo-tien-ling and Sai-machi, disposed of at least three divisions and some Kobi, supported by two Kobi brigades at Feng-huang-cheng and Kuan-tien-cheng. Nodzu, owing to the movements of his reconnoitring detachments, was thought to have two divisions and one Kobi brigade at South Feng-shui-ling, and one division at Hsin-kai-ling. Oku was credited with four divisions.

Kuroki temporarily resumed the offensive on 19th July, the 12th division driving a Russian force, of some 7000 men, with twenty-four guns, from Chiao-tao. This success established direct communication between the 2nd and 12th divisions, and secured the right of the Mo-tien-ling position.

From Chiao-tao a road led to Mukden, via Pen-hsi-hu, so that the reverse gave Kuropatkin fresh cause of anxiety for the security of his communications.

Against the total estimated strength of the Japanese of 160,000 bayonets and sabres, for the strength of the divisions seems to have been greatly exaggerated—the actual numbers were about 100,000 (Appendix VIII, Map 6)—Kuropatkin could at this juncture oppose about 140,000 sabres and rifles. To the Russian commander, before whose eyes difficulties appear to have bulked un-

duly large, the concentration of superior numbers against, one of the three Japanese armies whilst the others were contained and misled by activity and menaces, seemed however an insoluble problem; and he has left it on record that whilst sufficient men were not available to permit of successful attack on one of the hostile groups without risk of defeat by the others, the rainy weather had so seriously damaged the roads as to preclude the rapid movements necessary for victorious action on interior lines. Such arguments are not heard from the lips of great leaders like Napoleon, who are aware that no advantage can be gained without hazard, and that the difficulties of the enemy are at least as serious as their own.

In spite of his pessimistic views, Kuropatkin seems after Chiao-tao to have felt that some action ought to be taken, and as the leading troops of 17th corps had begun to arrive at Liao Yang, he decided to drive back Kuroki, and thus clear the Russian communications.

The Russian commander-in-chief, who, on the news of Te-li-ssu, had at once hurried southwards, now directed the bulk of the 10th corps to march, on 23rd July, to An-ping, and himself moved eastwards to supervise the operation.

These continued movements must have dislocated the arrangements of his staff, and the presence of the Russian commander in localities where detachments of his army had suffered reverses was likely not to improve, but to prejudice his grasp of the general situation, by leading him to attach undue importance to local incidents.

It has been urged on behalf of Kuropatkin that he mistrusted the capacity of his subordinate generals. If so his methods would tend to aggravate rather than to mend matters, and all his time and energies were required to arrange for the organization, and even training of his army. Many regiments possessed newly raised battalions; the East Siberian brigades had recently been expanded into divisions, and were full of drafts of men who had never seen a magazine rifle; and the transport train was not efficient.

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Moreover, the Russian armies were distributed in a series of independent detachments, without cohesion, or knowledge of one another's movements. Not even the force opposing Kuroki was under one commander.

Meanwhile Oku had reached Hsiung-yao-cheng on 21st June, and on 9th July occupied Kai-ping, the Russians retiring after a short resistance.

On 22nd July the Asada detachment was returned to the 1st army under instructions from General Headquarters, which had left Japan on 6th July and were now at Kai-ping. This redistribution was made apparently as a preliminary to the concentric forward movement by the 2nd and 4th armies which was about to be renewed, the fears as to the power of the Russian fleet to take effective action having doubtless been found to be exaggerated. The Japanese appear to have been aware that the Russians had received considerable reinforcements, that about two corps were holding an intrenched position at Ta-shih-chiao, and that a large force was standing at Hai-cheng behind them. To prevent attack in force on Oku, as soon as his army assumed the offensive, they were therefore probably anxious that simultaneous pressure should be exerted by Nodzu, who was believed now to be opposed by a division, and possessed sufficient force to deal with it; and that Kuroki, who was somewhat in advance of the other two, should both be credited with the receipt of reinforcements, which would cause the Russians to hesitate to despatch troops against Oku, and should be in sufficient strength to hold his own if attacked.

On 23rd July, Oku began his march against Ta-shih-chiao, and on the next day attacked the 1st and 4th Siberian corps at that place, who fell back after an indecisive action.

The position of Ta-shih-chiao, on one of the spurs flung westward into the Liao plain from the Feng-shui-ling group of mountains, had been strongly intrenched, so it is curious that the Russians, having accepted battle, offered so half-hearted a resistance, for they fought merely a rear-guard

action. A possible explanation is that until the 1st army, had been dealt with Kuropatkin did not wish his southern detachment to accept battle, but at the same time did not care to yield Ying-kou without a struggle. Zarubaiev had therefore been ordered not to commit his troops to close action, and fell back when news was received that the 4th army was advancing on Hsi-mu-cheng. As a result the Japanese gained the prestige of a victory, and the Russians sacrificed lives to no purpose.

On 25th, the 2nd army occupied Ying-kou.

On 28th, communication was opened between the 2nd and 4th armies, and the 5th division was placed under the orders of General Nodzu. The 4th army had on 24th moved slowly towards Hsi-mu-cheng and was now eight or ten miles south of that city.

Whilst these events were taking place in the area south of Liao Yang, Kuropatkin on 23rd had inspected the 10th corps during its march from Liao Yang towards An-ping, but finding the regiments devoid of pack transport, and aware that the 17th corps, the bulk of which was at Liao Yang, was in the same predicament, decided that an immediate offensive was out of the question, especially as the information as to the enemy's strength and dispositions was by no means reliable.

On receiving news of the defeat at Ta-shih-chiao the Russian commander returned to Liao Yang, leaving the eastern forces without a leader, though General Sluchevski, commanding the 10th corps, is said to have received instructions that if, as was now expected, Kuroki advanced on Mukden he was to be attacked at all costs; should the Japanese move on Liao Yang they were to be resisted to the last.

If the Russians were afraid of the 1st army, Kuroki was not less anxious as to the intentions of Kuropatkin, the news of whose arrival at An-ping, accompanied by a considerable number of troops, was received about 24th July.

The Japanese commander however approached the problem in a spirit of greater enterprise and resolution, and

of the three alternatives before him, retreat, which would perhaps have drawn the Russians further into the mountains, but might have demoralised his own troops and limited their power of co-operating with the other armies; inactivity, which would have left the initiative to the Russians; and attack, which was calculated to disturb the enemy, to upset his plans, and in this manner indirectly to assist the 2nd and 4th armies; he wisely determined to attack.

Calling up five Kobi battalions from his line of communication, he delivered an attack on 31st July, against the 10th corps at Yu-shu-ling and Pien-ling, and against Keller's detachment at Ta-wan. After severe fighting the Russians fell back under cover of darkness, practically unpursued, and took up positions on the hills east of An-ping.

On 31st July, no doubt with a view to co-operating with Kuroki, the 4th army advanced on Hsi-mu-cheng, and after another indecisive action, the Russians drew off on 1st August towards Hai-cheng. The action of the Russians may have been influenced by news of the victory of 1st army. Oku had also advanced on 1st, and meeting with little resistance, occupied Hai-cheng two days later, the Russians having fallen back to another strongly intrenched position at An-shan-chan.

The result of these operations was to bring the 2nd and 4th armies into close contact with one another, but the left of the 1st army was still separated by some forty miles of rough mountain and steep-sided valley from the right of the 4th army. The 1st army was also in point of distance a good deal nearer to Liao Yang than were the other armies, though, having regard to the nature of the country, there was not perhaps, in point of time, much difference in the distance of the three from the Chinese city.

The general disposition of the Japanese and the advanced position of the 1st army had however practically committed the Japanese to a converging attack on Liao Yang, for

whereas it might have formed a mobile wing of the Japanese forces, these could now manœuvre only with difficulty and risk. (Appendix IX, Map 7.)

Had not Oyama's hand for example been forced by the Russian advance against the 1st army, and had this army been held back on the line Chiao-tao to Mo-tien-ling, the 2nd and 4th armies might have been used to hold fast the Russians at An-shan-chan, whilst the 1st was employed to envelop their left.

The reasons given by General Kuropatkin for the withdrawal of his army to the positions in the neighbourhood of An-shan-chan, Lang-tzu-shan, and An-ping, are that the enemy possessed numerical superiority; better organization and equipment; youth, inurement to heat, and to movement over hills; higher military spirit, and more skilful leadership. With such pessimistic views as to the efficiency of his troops it is no wonder that the Russian commander was in grave doubt whether to await the onslaught of the Japanese at Liao Yang, or to retire as some of his generals desired north of the Tai-tzu.

Had it not been for the defeat of the Russian fleet outside Port Arthur on 10th August, which was followed by such alarmist reports as to the defensibility of the fortress that the Viceroy Alexiev urged that some effort must again be made to assist the garrison, even if nothing more was done than a demonstration against Hai-cheng, it is possible that the Russians might have withdrawn across the Tai-tzu.

But these circumstances combined with the fact that the 5th Siberian corps originally designated for Vladivostock was now being sent to Liao Yang, inclined Kuropatkin to await events in the positions then held by his army.

During August the Japanese operations were again suspended. Though heavy rains had disorganized the supply arrangements, this lull is probably ascribable to hopes that the result of the first assault delivered on Port Arthur between the 19th and 24th August, would set free the 3rd army for the decisive battle now imminent.

Meanwhile the Russians lay inactive in their advanced positions south and east of Liao Yang, Kuropatkin, whilst awaiting the arrival of reinforcements, being content to leave the initiative in the hands of the enemy, whose advance would be opposed if it was judged that the Russians had received sufficient accession of strength to render success probable.

It is a maxim of war that decisive success cannot be gained by an army that does not at some juncture assume the offensive, and in these circumstances if Kuropatkin decided to await the attack of the Japanese instead of attacking them, it should have been with the intention of assuming the offensive on the first opportunity.

The topography of the neighbourhood of Liao Yang was not unfavourable to the adoption of an attitude of expectancy, for the Tai-tzu is as a rule fordable in but few localities at this season of the year, and the Russians possessing six or seven bridges at Liao Yang secured by a bridgehead of forts and by an outer circle of intrenchments, as well as one or more bridges at a point some eight miles above this city, had ample means of crossing the river at will with more rapidity and in greater security than could the Japanese.

Had the Russians then chosen to await attack behind the Tai-tzu the Japanese would have been obliged either to undertake direct and costly operations against the bridgehead, with the eventual prospect of meeting a counter-attack when exhausted by their efforts to capture the forts. Or a portion of the army might have made a direct attack on the bridgehead whilst the remainder passed over the river in some other locality and moved against the flank and communications of its defenders; the Russians however, possessing means of more rapid passage, could then mass the bulk of their army on either bank, and attack one of the divided portions of the Japanese forces.

Or again, if the Japanese attempted to pass the whole of their army over the Tai-tzu either above or below Liao Yang, the Russians, who could concentrate more rapidly on either

bank, could attack in superior numbers the front or rear of the Japanese army whilst it was astride the stream.

It may here be remarked that had Kuropatkin spent even a few weeks of the period which had elapsed since the commencement of hostilities in building bridges and making bridgeheads on the lower reaches of the Tai-tzu river, from which he could have issued against the Japanese left, the operations of the Japanese would probably have assumed a different character.

Though in theory the temporary defensive possessed considerable attractions, in practice it was, judging from past history, at least probable, so difficult is it to husband reserves and to make the most of opportunities for their employment, that the Russians might not reap the advantages of the situation were the initiative left to the enemy, and being again obliged to conform to his movements, might be unable to attack him at their pleasure.

Besides even the temporary defensive possesses moral drawbacks, for it is a confession, however grudging, of inferiority.

Even admitting the supposed numerical and moral superiority of the Japanese, and their advantages in the matter of equipment and leadership, the situation of the three armies, lying on the arc of a semicircle, of which the Russians formed the chord, and with a considerable gap between their right and centre, was such as to present considerable prospects of decisive victory for the Russians after the successful adoption of the offensive so ardently advocated by Alexiev.

The 1st army most nearly menaced the Russian line of communication and for this reason its defeat would have been advantageous. In case of failure irretrievable disaster was not probable, for the troops detailed to hold fast the 2nd and 4th armies should, with the help of the forts and intrenchments at Liao Yang, have been able to keep them off until the remainder of the Russians were safely across the Tai-tzu.

Leaving 60,000 sabres and bayonets to contain Oku and Nodzu, whose armies were thought to comprise 150 battalions, or from 100,000-120,000 men, Kuropatkin could have attacked Kuroki's force with about 80,000-90,000 sabres and bayonets, which would have given him a small numerical superiority on the estimated strength of the 1st army, 65,000-70,000 men. Actually the Russian preponderance over the Japanese would in this quarter have been as about 2-1. (Appendix IX, Map 7.)

On the other hand, owing to the organization, transport, armament, and training of the Russians, operations on a large scale in the mountains presented serious difficulties, and their dispositions were such the attack must to a great extent have been direct rather than enveloping, for only about 15,000 bayonets from Liao Yang, besides troops from Mukden, were available to movement in any given direction. These might have been used to envelop the left of the 1st army, separating it from the others, an operation which, if successful, would have involved the retreat of the 1st and of the other armies, but not their ruin without further victorious actions. Or the troops from Liao Yang, etc., could have been sent against the right of the 1st army from the direction of Pen-hsi-hu, where local success could perhaps have been most easily attained, but the immediate result might only have been to force the three Japanese armies into one straight line, though Kuroki's line of communication to the Ya-lu would probably have been severed.

Against Oku and Nodzu, the Russian commander-in-chief could, after detailing about 50,000 sabres and bayonets to engage Kuroki, oppose between 90,000-100,000 sabres and bayonets, to their estimated total of 100,000-120,000 and actual strength of nearly 85,000.

Successful attack on the 4th army would no doubt have caused a general retirement by the Japanese, but further operations would have been necessary to consummate the success, and the principal fighting would have taken place

in a hilly region, where the rapid success essential to final victory, or even to escape envelopment by the Japanese wings, was unlikely to be attained.

The 2nd army however not only directly covered the main lines of supply of the Japanese forces to Ying-kou and Dalny, but also the siege of Port Arthur. It was standing in a flat district more suitable to the Russian tactics and armament than was the mountainous area south-east and east of Liao Yang, and the railway could be used to facilitate Russian concentration in this direction. If then this army could have been routed, the Japanese forces would probably never have recovered from the blow, even if they did not absolutely perish from the consequences.

It seems then that an offensive against the army of Oku offered the greatest advantages.

In the event of failure there was certainly the risk of envelopment by the 1st Japanese army, but the 3rd Siberian and the 10th corps should, with the help of the detachment lying north of the Tai-tzu near Pen-hsi-hu, have been amply sufficient to guard against this contingency, pending the result of the operations against the troops of Oku and Nodzu.

In any case a general should have regard to the advantages rather than to the dangers of a venture, and to what may be gained rather than to what is at hazard.

Viewing the question from this standpoint, it must be concluded that of all the alternatives before Kuropatkin, most was to be gained by success against the Japanese left, and that he might therefore have taken the risks incidental to this operation and concentrated every available man against the army of Oku, reducing the detachments required to contain the remainder of the enemy's forces to the lowest possible limits. Kuropatkin however continued to wait on the movements of his opponent.

The news of the failure of the assault on Port Arthur placed Oyama in a difficult position. All prospect of fighting a decisive battle with the advantage of numbers

in his favour had vanished, and though his units had received large drafts and were up to or over their establishments, he found himself, with his forces still unconcentrated, opposed by an enemy believed at the moment to possess preponderance of numbers to the extent of some 20,000 bayonets and sabres, and likely in the near future to receive considerable reinforcements.

Of the three alternatives open to the Japanese, retirement would in a moral and political sense have been disastrous, the soldiers would have been discouraged, ground gained at great cost of life would have been abandoned, and external loans on which the continuance of the struggle largely depended would have ceased.

To have remained inactive, especially after a reverse, would have disheartened the troops, and would have left the initiative to the enemy, who could have attacked at his leisure, and when in overwhelming strength and in the full flush of confidence.

Even with troops who have experienced an unbroken series of successes a direct attack on intrenched positions held by an enemy superior in numbers is a hazardous venture. In war a commander is however usually confronted by choice of evils, and in such circumstances the safest plan is to adopt the course most likely to lead to decisive results, unless exceptionally cogent reasons can be urged in favour of less conclusive action.

In this case the Japanese plans had been seriously compromised by what is thought to have been initial disregard of the principle of concentration of effort. There was however only one practicable way out of the difficulty, and that was to continue to press the Russians in the hope that superior fighting power and bolder generalship would be crowned by victory.

This alternative was chosen by Oyama. As before, the 1st army was first committed to action, with the object, it is said, of causing the Russians to evacuate the Anshan-chan position. The Japanese, who as has been shown

were already committed to a converging attack, as a result lost all power of manœuvre, except with such troops as could, at considerable risk, be withdrawn from the battle frontage.

In the event they were however victorious, principally because Oyama established and maintained moral superiority over Kuropatkin, who was forced to conform to the movements of the Japanese, abandoning his own plans. (Map 8.)

His plan appears to have been to hold the positions at An-shan-chan, and south and east of An-ping, sufficiently long to oblige the enemy to show his hand and force. Having accomplished this, the army was to retire on the forts and intrenchments that had been made round Liao Yang, then, pivoting on this bridgehead, it was to manœuvre on both banks of the Tai-tzu. If the enemy divided his forces and placed them astride the river, the Russians would fall in superior numbers on one or other fraction.

The plan though cautious might if successfully executed have given the Russians a great victory. On the other hand success could be attained only after somewhat complicated manœuvres, and it is an axiom that to retain, during an action, the control of troops sufficient for an effective counter-attack is as difficult as to judge correctly the moment most opportune for the offensive. Moreover the troops holding the advanced positions were liable to defeat in detail, and if not beaten must at any rate have been subjected to the demoralising influence of another retirement.

V

September. **W**HETHER the operations subsequent to the battle of Liao Yang do not more properly belong to the domain of tactics is doubtful, but the very magnitude of the frontages was such that the movements of the armies may perhaps still be treated under the heading of strategy.

After their defeat at Liao Yang the Russians, having destroyed or seriously damaged the bridges over the Taitzu, retired northwards with stolid deliberation, unpursued by the Japanese, the main body reaching the neighbourhood of Mukden on 6th September.

Kuropatkin's first impulse seems to have been to evacuate Mukden, and retreat to Tieh-ling, a town about forty miles north of the Manchu capital, where on an offshoot from the Manchurian mountains is a position suitable for defensive tactics.

But circumstances soon caused the Russian commander to change his mind. In the first place the Japanese pursuit ceased. Then political pressure to discontinue the retirement appears to have been brought to bear on him from Russia, through the Viceroy Alexiev. Again the Russians were much dependent for meat supply on Hsin-min-tun, and were naturally unwilling to abandon to the enemy Mukden, a town lying in a rich grain-growing district, and of considerable political importance.

It was therefore decided to halt at Mukden, and the army was quartered in this neighbourhood, as follows:—

Of the cavalry, Grekov's Orenburg Cossack division kept touch with the Japanese along the Sha and Shi-li rivers; Mischenko, with the Trans-Baikal and Ural Cossack

brigades, stood eastwards, as far as the Fu-shun to Pen-hsi-hu road; and the cavalry division under Samsonov watched the country east of Fu-shun. Besides these, there were the customary detachments wide to both flanks.

The 10th and 17th corps, with the 2nd and 4th Siberian corps, remained south of the Hun river, and were employed in constructing a semicircle of forts, round a radius from Hun-ho-pu to Yan-su-chian-tzu, to act as bridgeheads to the bridges carrying the railway and Imperial or Mandarin road.

The 1st Siberian corps proceeded to Fu-ling, six miles east of Mukden, the 3rd to Fu-shun, twenty miles further east. The two then began to intrench the line of the Hun from Mukden to Fu-shun, constructing works on both banks of the river, and roads from Mukden to the localities occupied by the various corps. The 1st corps now arriving from Europe, had its headquarters at Pu-ho, fifteen miles north of Mukden. Of the 5th Siberian corps which had been broken up during the battle of Liao Yang, the bulk was sent under General Dembovski into the area between Mukden and Hsin-min-tun, the remainder being attached to the 3rd corps.

Soon after Liao Yang the Czar, believing that the defeat of the Russians had perhaps in part been due to the fact that the Russian army was too large a command for one individual, decided to form two armies in Manchuria, under Admiral Alexiev as commander-in-chief, one to be commanded by Kuropatkin, the other by General Gripenberg, at that time commanding the Vilna army corps.

This appointment may have turned Kuropatkin's thoughts to projects for retrieving his reputation, and the fact that a squadron from the Baltic was about to sail for the Far East rendered another effort to relieve pressure on Port Arthur, or at least to prevent the despatch of reinforcements from the field armies to the 3rd army, almost a necessity.

The Russian army had moreover received such accession of numbers that the prospects of victory no longer appeared

unpromising; for besides the 1st corps there had arrived from Europe Q.F. guns in substitution for those of older pattern up to that time in use by the Siberian corps, and the 6th Siberian corps was well on its way to the seat of war.

Lastly Kuropatkin, consequent perhaps on his experience at Liao Yang, deemed that the position at Mukden, astride a great river, in front of a large city, and with its left thrown back by a bend of the river towards the Russian line of communication, was unfavourable for battle.

Before attempting to attack the Japanese, Kuropatkin, taught by his difficulties at Liao Yang, proceeded to delegate his authority, and to decentralise command, by organizing his forces into three groups or armies. Of these, the Eastern detachment, lying east of Mukden, was composed of the 1st, 2nd, and 3rd Siberian corps, with General Samsonov's Cossack division, all under General Stackelberg. The Western detachment of the 10th, 17th corps, and portions of the 5th Siberian corps under General Dembovski, with General Grekov's Cossack division, was under General Bilderling. A central force consisting of the 1st corps, the 4th Siberian corps, the 6th Siberian corps, when it came up, and Mischenko's Cossack division, was under the commander-in-chief. In addition, the usual strong mixed forces watched both flanks, showing that the moral superiority rested with Oyama, and that Kuropatkin was concerned rather with the possible movements of the enemy than with his own, and with the parrying rather than the delivery of blows. (Map 9.)

Attention was also given to mapping, for the Russians knew little of the area round Mukden, but apparently not much was accomplished, for Stackelberg's detachment is said to have possessed but few maps when orders were received for the advance against the Japanese.

Whilst the Russians were thus engaged, the Japanese, exhausted by their efforts at Liao Yang, had halted, the 1st army on the line Hei-yin-tai to Lo-ta-tai, the 2nd and 4th armies south of the Tai-tzu, and west and east of Liao Yang.

About 14th September, Marshal Oyama seems to have

decided to undertake further offensive operations in a month's time, by which date, no doubt, drafts to make good the losses of Liao Yang would have arrived, as well as the 8th division.

Accordingly instructions were issued to this effect, and each army was allotted the district in which to advance, probably with the object of enabling the commanders to set about the collection of topographical and other information. The troops were at the same time warned that in future frontal attacks, when unaccompanied by enveloping movements, were to be avoided as far as possible. This last provision exactly coincided with tactical instructions promulgated by the Russians about the same time.

To the 1st army was assigned the Ta-lien-kou to Pu-tsao-yai road, and the district eastwards as far as Pen-hsi-hu. The 4th army was to use the roads on either side of the railway, and the 2nd army the roads westward as far as the right bank of the Hun. The reserve, of Kobi brigades, was to march west of the railway, and behind the right of the 2nd army.

It was not until 10th September, after the bridges over the Tai-tzu at Liao Yang had been repaired, that the 2nd army began to cross the river and to intrench itself on the line Shan-tai-tzu to Ta-pa-tai-tzu.

At about the same time the 4th army took up the line Nan-tai to La-ni-pu.

The bulk of the 1st army now stood between La-ni-pu and the Yentai coal mines. Umezawa's detachment was however about fifteen miles to the east, at Pien-nu-lu-pu, where it had been posted partly for the purpose of reconnoitring the district allotted to the 1st army, partly because this village lies in an important valley centre, whence roads lead to Pen-hsi-hu, and thence to Chiao-tao and the Ya-lu.

Both commanders were contemplating offensive operations, and each therefore wanted information as to the enemy's dispositions.

Though the cavalry covering the Russian front made it

difficult for the Japanese patrols to penetrate the line of the enemy's advanced posts, the Japanese General Headquarters obtained from other sources fairly accurate information of the Russian dispositions; and after all cavalry more often than not can only confirm, or show to be false, news obtained from other sources. It was known that the whole Russian front and flanks were covered by cavalry; that the 5th Siberian corps was reported west of Mukden, the 10th and 17th corps round or close to the city, the 1st and 2nd Siberian corps east of Mukden; but the 3rd Siberian corps was not located. News was also received that works were being constructed north of the Sha Ho, and east of Mukden, and that the 1st European and 6th Siberian corps had reached the front.

War cannot be made without some hazard, and the object of a commander should be so to plan his operations that if successful the greatest advantages will be gained, irrespective of the consequences of possible failure. Each blow should therefore be so aimed and delivered that the enemy will be forced directly to parry it, and to conform to the movements of the attacker, abandoning his own projects. This will be the case when the envelopment of the adversary or the security of his line of communication is in question.

The plan or its execution will however be at fault should the situation develop in such a manner that the enemy can by counter-attack throw the whole of the attacking army on the defensive, or can force the attacker to fall back for the purpose of securing his own line of supply.

It has been said "that rivers and mountains, like other complications in the art of war, afford additional opportunities to skill and talent, and additional embarrassments to incapacity"; and, indeed, the part played in these operations by the great Hun river, and the mountains north of Pen-hsi-hu, fully exemplify the truth of this statement.

The Hun certainly complicated the problem presented to Oyama, for he could not, without placing his army astride so serious an obstacle, carry out a converging movement against the Russians, nor could he, without considerable risk of interruption of his own line of supply, attempt to turn or envelop their right flank. On the other hand, the Hun would present equal difficulties to Russian attack from this direction, and would therefore protect the Japanese left. Equally the presence of the mountains, where movement and operations are always slow, would have been prejudicial to turning movements from or against the Japanese right.

Had there been available means of rapidly transporting his army west of the Hun, the Japanese commander-in-chief might perhaps have been tempted to try and surprise the enemy by moving the whole, or at any rate the greater part of his forces over the Tai-tzu and Hun, near Hsiao-pei-ho. Marching between the Hun and Liao rivers he could then have attacked the Russian right, thus turning the fortifications south and east of Mukden and at the same time using the Hun as a line of supply.

Under this plan some risk must have been run in uncovering even temporarily the main line of supply from Ying-kou and Dalny, and the army would have been liable to defeat in detail during the passage of the river. On the other hand, food and munitions could have been brought by junk up the Liao and Hun, and a few field works at Liao Yang should have sufficed to protect the line of communication until Japanese pressure on the Russian communications had obliged the latter to abandon any enterprises that might have been undertaken south of Mukden.

If unable to adopt so bold a course, Oyama, trusting to the protection afforded to his left by the Hun, might have repeated the tactics of Liao Yang, advancing directly on Mukden with the 2nd army, and moving the 1st and 4th armies in echelon behind the 2nd, through the hills

towards Fu-shun. Here they could probably with ease have forced the passage of the Hun, but supply in the hilly country might have presented difficulties, and of the topography of this district but little was known. The advance through the mountains would moreover necessarily have been so slow and precarious as to have exposed the 2nd army to defeat before the remainder could intervene; and a Russian success or even a serious attack against the 2nd army would probably have constituted so grave a menace to the security of the Japanese communications as inevitably to have caused the abandonment of enveloping operations by the right.

Or Oyama could have imitated the strategy of Lee in 1862, and detached Kuroki to move round the Russian left whilst the rest attacked or remained fronting the Russians. In this case also defeat in detail was a contingency to be reckoned with.

Again, a less ambitious, though probably not less hazardous alternative, could be adopted, and direct advance undertaken in the direction of Mukden and Fu-shun.

The situation of the two armies, now fronting each other, in a plain enclosed by a great river system on the one hand, and tracts of rugged mountains on the other, and both standing astride their lines of communication, however imposed either a bold turning movement, or an equally dangerous, though to outward appearance less risky frontal advance against the Russians. The last course would moreover be the least likely to lead to decisive results.

The alternatives presented to the Russian commander-in-chief much resembled those placed before Oyama.

About the middle of September, the information available to Kuropatkin inclined him to believe that the Japanese armies numbered 160,000-170,000 men, that is to say about 40,000 more than actually were present. It was thought that two Japanese divisions, with Kobi behind them, were between Nan-tai and Shan-tai-tzu, that four divisions with some brigades of Kobi were immediately north of Liao

Yang, two divisions near the Yen-tai coal mines, and two divisions and some Kobi between Pien-nu-lu-pu and Pen-hsi-hu. It was known moreover that all the Japanese troops were intrenched.

Several courses were open to the Russian leader. He could utilise the Hun as a line from which to manœuvre, constructing bridges, and building bridgeheads at, say, Chan-tan, Hun-ho-pu south of Mukden, and at Fu-shun, and keeping his army, with the exception of his cavalry, north of the river. But this plan would be unenterprising, and therefore a confession of weakness and inferiority.

Whilst fortifying Hun-ho-pu to secure his communications, and covering his front with cavalry, who would be especially active in the hilly country, he could march the bulk of his army down the right bank of the Hun, and cross the river south of Chan-tan and Hei-kou-tai. This project would involve the passage of the Hun, a broad river, in somewhat close proximity to the Japanese left, and though the blow would fall near the Japanese main line of communications, to reach them would involve the passage of the Tai-tzu in a locality where the river is not less than 300 yards wide.

Again the Russian general could move his army southwards, astride the Hun, attacking the Japanese in front with one portion, and when their attention was fully engaged, throwing the remainder across the river on to their left flank. In this case there would be risk of defeat in detail, for the enemy might envelop the troops east of the Hun Ho, or might even make a counter-attack towards Fu-shun. If the Japanese however advanced on Fu-shun, their movements in the hills, especially if opposed, would be slow, and the blow would be somewhat wide of the mark.

Or the Russians, advancing from Mukden and Fu-shun, might try to envelop the Japanese right in the mountainous region of Pen-hsi-hu, whilst closely engaging their front; having defeated the right little physical difficulty would

be experienced in crossing the Tai-tzu, and advancing against the Japanese communications. In order that the enveloping movement might come as a surprise to the enemy, it should take place after his front had been attacked. Objections to this project would be that the mountainous districts were but imperfectly known; that the Russian armament was not well suited to mountain warfare, for only three or four mountain batteries were available; that supply would be difficult; that movements in mountainous country are always slow, but are particularly so when opposed; that the left must move further and over more difficult ground than the right and centre, and that the synchronising of the operations might therefore prove difficult; that the Japanese main line of communication was many miles distant, and that therefore to sever it would be difficult; that there would be risk of defeat in detail, for the enemy, whilst containing with a detachment the Russian left which must advance through a mountainous district where decisive success could not rapidly be attained, might attack in strength their centre and envelop their right; and lastly, unless the Japanese conformed to movements of the Russians the advantages of the situation would lie with the Japanese, who by attack on the Russian right could offer a more serious menace to the Russian communications, than would even Russian success at Pen-hsi-hu to those of their own army. In such eventuality persistence in this plan would demand uncommon firmness of character.

The Russians might also advance in three converging masses with the object of enveloping the enemy, though, having regard to the fighting power of the Japanese, a numerical preponderance which the Russians did not possess would be necessary to ensure victory. Or they might move in double echelon from their centre, holding back both wings so as to meet and counter the enveloping tactics practised by the Japanese. Such policy would lead to a desperate frontal battle, without much prospect of decisive victory.

Lastly, an attack might be delivered on the Japanese right, with the object of drawing the Japanese reserves in an easterly direction. This accomplished, the Russian right and centre, which would have been withheld from close action, might attack with success.

To this plan it may be objected that the main operation, though directed against the troops covering the principal Japanese line of supply, would be merely a frontal attack, and therefore more likely to be costly than decisive. Since moreover the Japanese right covered no vital point or important line of communication, it was unlikely to be reinforced at the expense of the centre. The Japanese might also consider that an advance against the Russian right would afford more effective relief to their own right than the direct despatch of reinforcements to this flank, more especially as the Russian communications lay behind their right flank.

Though Kuropatkin was of opinion that his army was still numerically too weak to undertake the offensive with any considerable prospect of success, he decided that active measures were preferable to awaiting attack in the unfavourable positions at Mukden.

The following tasks were therefore confided to the three portions of his army. The force under Bilderling was to make a demonstration against the main force of the enemy, moving along the railway. The troops under Stackelberg were at the same time to envelop and attack the enemy's right. The central force was to march behind and in the interval between the others, as a reserve, and if the Japanese were found to be concentrating towards their right the reserve was to co-operate with Bilderling in an attack on the centre of the enemy's line.

In criticising the Russian dispositions (Appendix X, and Map 9) it may be remarked that Kuropatkin would perhaps have been better advised had he, instead of placing his reserve behind the centre in position directly to reinforce a wing, either posted two corps along the Sha Ho to

the east of the railway, and three corps in the interval between the railway and the Hun; or if space for so many men was not available to the west of the line, had he added one corps to his left wing and placed two corps along the Sha Ho to the east, and two corps with Dembovski's detachment to the west of the railway. The three groups could then have come into action simultaneously, or successively, as desired, whilst the corps west of the railway could have outflanked the enemy's left. At the same time such of his 17,000 cavalry as were not required for local protection might, since the Japanese cavalry was not numerically formidable, have been formed into two masses of say 7,000 and 10,000, the larger to operate against the Japanese right, the smaller against their left wing.

The flank detachments might also have been very much reduced in strength so as to enable effort to be concentrated at the decisive point, the field of battle.

The dispositions of the Japanese army may be criticised in the sense that they were perhaps better adapted for a defensive battle for the possession of Liao Yang, than for the offensive movement which Oyama is said to have contemplated, long marches to either flank being necessary before the troops could reach positions from which to commence an enveloping movement.

Oyama seems to have received early intimation of the enemy's projects. On 28th September, the actual date on which Kuropatkin issued his general plan—with only a reservation that the time for action was to be notified later—the Japanese commander-in-chief informed his army leaders that the Russians might at any moment move in force against Pien-nu-lu-pu, and that arrangements must therefore be made against this contingency.

October. Again, on 2nd October, a Russian army order was published and copied in the Press, announcing that the time had come for the Russian army to take the offensive and drive the enemy southwards.

This may have been regarded by the Japanese as a ruse,

for in spite of the warning they were in some degree surprised by Kuropatkin's adoption of the offensive.

As happened throughout the war, the Russian operations, conceived in a half-hearted doubtful spirit, were executed in so slow and hesitating a fashion that the Japanese, by a vigorous offensive, were able to deprive the enemy of his initial advantage, and Kuropatkin, finding his communications menaced by some successes on the part of the Japanese left and left centre, was content to abandon his projects and to conform to those of the enemy.

After severe fighting the armies halted, exhausted and facing one another, on the banks of the Sha river, where they settled down, in close contact, to await—the Russians the arrival of reinforcements, before again undertaking the offensive, the Japanese the release of their 3rd army by the capture of Port Arthur. (Map 10.)

The Viceroy Alexiev was recalled soon after the Sha Ho battle, leaving Kuropatkin free to direct operations, and to continue the work of organizing the army.

For some months the Russians devoted themselves to reorganization, and to the absorption of reinforcements. Both sides also busily intrenched, and whilst bickering was frequent, the fighting rarely assumed serious proportions, notwithstanding that the troops were in places not fifty yards apart.

November
and
December

The fall of Port Arthur on 1st January having practically extinguished Russia's chances of obtaining command of the sea, the Russian field army became the primary objective of the Japanese. (Appendix XI and Map 11.)

January,
1905

The Russians having now completed the organization of their army, and being in sufficient numbers to warrant hope of successful attack before troops set free by the fall of Port Arthur could reach the enemy, Kuropatkin consulted his army commanders as to the desirability of an immediate offensive. It was however decided that no forward movement should take place until the whole of the 16th corps was available—part had already

reached the front, and the rest would arrive in a fortnight.

Two great obstacles stood in the way of active measures—the shortness of the days and the coldness of the time of year.

In spite of the rigorous climate Kuropatkin decided to attack the Japanese, hoping perhaps that the Russians, inured to cold, would support the inevitable hardships better than the enemy.

Before taking the offensive, the Russian leader, either with the object of discovering if any troops from Port Arthur had reached the armies, or to alarm the enemy as to his communications, and to delay, by destroying the railway, the movement of Nogi's army, sent round the Japanese left a force of about fifty squadrons, with half a dozen batteries, and a few infantry. This detachment was under Mischenko, who had orders to destroy the depots at Ying-kou, and to blow up railway bridges in the area between Ta-shih-chiao and Kai-ping.

The raid ended on 11th January, and was so far successful that the Russians appear to have learnt that no troops of the 3rd army had reached Liao Yang.

At this juncture the Russian general staff credited the Japanese armies lying north of Liao Yang with a total of about 200,000 rifles, 7000 sabres, and 600 guns; the 3rd army was believed to number about 70,000 rifles and 150 guns. (Appendix XI, Map 11.)

Kuropatkin, who could now dispose of some 300,000 rifles and sabres and 1200 guns, therefore resolved on an offensive, and in accordance with the unanimous opinion of his army commanders decided to envelop the Japanese left. The army of Grippenbergh was to be employed for this purpose, and if its operations were attended by any measure of success the other armies were to attack the Japanese positions. Should the Japanese reply by a counter-attack on the Russian left the operations against the Japanese left were to be prosecuted with greater energy.

Not content with indicating the broad outlines of his

plan, the Russian commander-in-chief, like other leaders upon whom responsibility has weighed too heavily, plunged into a maze of minutiae, and overwhelmed his army commanders with orders and instructions as to details in regard to the most elementary of their duties. He thus distracted his own attention and those of his subordinates from contemplation of essentials, and one and all lost grasp of the situation.

There seems no doubt that having regard to the frontage occupied by the two armies, the estimated numerical superiority of the Russians, some 100,000 men, and the strength of the Russian front line, behind which manœuvre should not have been difficult, Kuropatkin possessed the power to deal a serious blow on either flank. This the Japanese would find difficulty in parrying, unless troops were withdrawn from the first line, in which case there would be risk of the front being broken.

The left flank of the Japanese was most inviting; here the country was not so difficult as were the eastward hills, the distance to be traversed by the Russians would be less than would be required to turn the enemy's right, and the Japanese left was nearer their main line of communication. If, then, the left were broken, the enemy's line of supply would be in serious danger, whilst Russian troops could be massed in this locality without prejudice to the direct protection afforded to their own line of communication.

On the other hand, the Japanese reserves were thought to be standing near Yen-tai station, and therefore well placed to reinforce the left.

Kuropatkin's plan was however not such as would secure victory from an enterprising opponent, for the Russian commander was apparently unwilling to commit his left and centre to close action until success had been gained elsewhere, lest the enemy should deliver a counter-attack and drive the Russians back over their works. Nor would he weaken his line in order to free troops for an attack in the greatest possible force against the enemy's left.

The moral superiority in fact still rested with Oyama, and Kuropatkin seems to have been afraid to venture a decisive blow. Even his preliminary measures were not above criticism.

Forewarned is forearmed, and a primary condition of success in war is therefore that the enemy shall be misled, and that the blow when delivered shall come as a surprise.

The Russians however neglected this rule, for from 13th January onwards the Russian right began to show unusual activity, a balloon usually raised at Sha-ho-pu moving westwards, whilst on 17th and 18th cavalry occupied Su-fang-tai, west of Chan-tan.

It may of course be said that these manoeuvres might have been a ruse to draw the enemy's attention westwards; and this fact constitutes one of the great disadvantages of the defensive, in that the defender can rarely be certain whether the enemy's movements are a stratagem, or the prelude to an attack.

The Japanese however possessed other information of the Russian intentions, for on the night of 24th January, six Russian soldiers who surrendered to the Japanese in different portions of the frontage held by the armies—and such desertions were unfortunately frequent, especially amongst the Jews in the Czar's service—all reported that an attack would be made on 25th against the Japanese left.

In spite of this the Japanese were somewhat taken aback when on 25th the enemy attacked in force the village of Hei-kou-tai. The Russians were however driven back after three days' hard fighting.

As at the Sha Ho, the Russians lost their initial advantage through the undue deliberation of their movements, and no serious operations took place against the Japanese front to prevent reinforcement of the threatened point.

The Japanese contented themselves with beating off the attack, probably because they were unwilling to become involved in a decisive battle before the arrival of the 3rd army.

In the interval between the battle of Hei-kou-tai and that of Mukden no stirring events occurred, but as a result of Hei-kou-tai both sides increased their fortified frontage, the Japanese continuing to hold Hei-kou-tai and the neighbouring villages in force, whilst the Russians threw up intrenchments west of Chan-tan.

In other respects the Russians do not seem to have greatly altered their dispositions, though on account of Japanese raids, and of reports as to the presence of a force of Japanese in Mongolia, a brigade of the 41st division, the Don Cossack division, and some 15,000 men of drafts were detailed to reinforce the troops guarding the railway line. At the same time rumours of the landing of a large body of Japanese in Northern Korea induced Kuropatkin further to disseminate his troops, six battalions and a number of reservists being despatched to Vladivostock.

The arrival of the 3rd army, and the completion of Kawamura's 5th army, caused considerable changes to be made in the arrangement of the Japanese troops. (Appendix XII, and Map 12.)

The annual thaw was now imminent, which would melt the icebound rivers, and render the roads almost impracticable for traffic, and the fields difficult even for the operations of infantry. It was therefore to be presumed that in spite of the cold one or both commanders would assume the offensive, more especially since the Japanese, now that the 3rd army had arrived, could not for some time at any rate expect further reinforcements.

Immediately after the action at Hei-kou-tai Kuropatkin had resolved again to take the offensive. Uncertainty as to the direction in which the Japanese would deploy the 3rd army, and doubt whether it would not be best to await the arrival of large reinforcements amounting to some 70,000 men now on their way from Europe, caused him for a time to suspend active measures. On 21st February the Russian commander-in-chief however reverted to the bolder policy.

The experience of the Sha Ho battle had taught the Russians the local resisting power inherent in mountain positions, and whilst railways had been run to various portions of the Russian frontage, thus facilitating supply, none had been laid far into the mountains south of Fushun. The feeding of a large force in this locality would therefore have demanded quantities of transport, which could probably only be procured with difficulty. Moreover to have turned the Japanese right would have required a long detour, for Kawamura's army was some distance east of Pen-hsi-hu; and success, if attained, would probably have been local rather than decisive, for the enemy's main line of communication lay many miles from the 5th army. Attack on the right was also apparently expected by the enemy, or it was his intention to operate so as to envelop the Russian left, for according to Kuropatkin's information the bulk of the 3rd army had been sent to Kawamura. Again the armament of the Russian army, possessing as it did but few mountain guns, was not well suited to hill warfare; and lastly if he moved a number of troops eastwards, Kuropatkin would weaken the force covering his own communications, and render himself liable to successful counter-attack west of Mukden.

Conversely, the position of the Russian reserves, the alignment of the auxiliary railways, the armament of the Russians, their preponderance in cavalry, and the level nature of the country, would facilitate operations against the Japanese left. By adopting this plan, Kuropatkin would be retaining the bulk of his army near Mukden and his line of communication; it might reasonably be hoped that Kawamura's advance through the mountains could be sufficiently retarded to enable decisive success to be gained against the Japanese left; and above all victory if gained would be decisive.

On the other hand the Japanese reserves were thought to be near their left flank.

Adhering to the plan adopted before the action of Hei-

kou-tai, Kuropatkin decided to attack the Japanese left, but without attempting envelopment, the intention being apparently to crush the enemy's left by weight of numbers, about four corps being used for this purpose, whilst of the remainder the bulk were to await the result of the first encounters before attacking the armies of Kuroki and Nodzu, the reserve being employed according to circumstances.

This plan may be characterised as a half-measure, and it would have been wiser to have withdrawn certainly one, probably better still two corps, from the strongly fortified frontage, and to have placed a mass of five or six corps, including the reserve, west of the Hun, covered by 10,000 or 15,000 cavalry. The enemy's right and front might then have been attacked, and when these had been closely engaged, the stroke might have been launched against their left.

On 24th February, the very day before the attack should have commenced, the Russian commander-in-chief found a fresh excuse for hesitation and again suspended operations.

He had, it appears, heard that the Japanese were aware of his projects, that by withdrawing troops from their centre they had massed 125,000 men and 340 guns on their left, and behind these had large reserves at Hsiao-pei-ho. Moreover a strong attack by the 5th army on the Russian left had been reported.

Instead of at once seizing the initiative so as to disturb the enemy's plans, and either attacking the Japanese centre in force, or withdrawing troops from his own front to counter the expected blow, Kuropatkin despatched a staff officer to confer on the situation with the commander of the 2nd army, who in a subsequent conversation on the telephone was given discretion by the commander-in-chief whether to attack or to await developments.

Naturally General Kaulbaur, on whom such responsibility should never have been thrust, chose the second

alternative, and again the Russian army surrendered the initiative.

The Japanese had already adopted a formation calculated both to meet envelopment by the enemy, or should he remain on the defensive, to facilitate the envelopment of his forces; the 3rd army being placed behind the left, the 5th behind the right flank. They had moreover decided to assume the offensive on 20th February, their plan apparently stopping short at nothing less than the envelopment of the Russians, the 5th army operating against the enemy's left, the 3rd army against his right.

In order however to deceive the enemy as to their intentions, and to induce him to send his reserves eastwards, thus facilitating the deployment of the 3rd army, Kawamura was to move first.

This stratagem succeeded, and to it the Japanese were a good deal beholden for their victory.

Events nevertheless proved that the Japanese plan was rather beyond the capacity of their forces. In these circumstances, it would probably have been better to have reduced the strength of Kawamura's army, and added these troops, as well as the general reserve, which was retained behind the centre far into the battle, to the 3rd army.

This army would then have comprised about five divisions, and its operations would probably have been decisive.

By withdrawing cavalry from the divisions of the 2nd and 4th armies, where but little scope existed for mounted action, a larger mass might also have been placed on the left, with advantage to the Japanese operations.

The battle of Mukden closed the long series of active operations in Manchuria on a great scale, and though for many months the war on land dragged on with skirmishes and minor affrays, both Russians and Japanese more or less tacitly agreed to await the final contest for superiority at sea which ended in the destruction of the Russian fleet at the battle of Tsushima on 27th and 28th May, 1905. On 8th June President Roosevelt suggested to the Russian

and Japanese Governments that a conference should be called to consider the possibility of a satisfactory agreement. The proposal met with approval, the conference assembled on 9th August, and on 5th September, 1905, the treaty of peace was signed, and subsequently ratified.

VI

THE strategical lessons of the Russo-Japanese war are those which throughout history have clamoured for recognition, but have seldom been thoroughly appreciated.

Often governments have courted disaster by living in the present, by disregarding future possibilities, and by pursuing, regardless of consequences, policies likely to end in disaster.

The Russian government, hypnotised by the vastness of her empire, and encouraged by the respect for her actions displayed by certain European ministries, embarked thoughtlessly on an ill-considered policy of expansion. This brought her face to face with an apparently weak but determined foe, whose very existence was threatened by Russian pretensions.

Russia's policy in this particular outstripped her strategy, that is her forces were not so disposed as to secure her interests should their pursuit lead to conflict with Japan.

As a result, the great northern power paid the usual penalty for unpreparedness, bad organization, and unsound distribution of force. She lost the initiative, was obliged to conform to the operations of the enemy, and to push into the front line, as they arrived in the theatre of war, a heterogeneous collection of units who were without cohesion.

As always happens in such circumstances, councils were divided, plans hastily arranged, and as hastily abandoned, or when carried out were spoilt by hesitation. Generals had confidence neither in themselves, in one another, nor in their men, and the troops, sharing this feeling, mistrusted their leaders.

Fighting as they were in the midst of a semi-hostile population, and dependent for maintenance to a great extent on their single line of railway to Europe, the Russians were also, from the first, forced to make large detachments to guard their communications, as to the security of which they were naturally sensitive. Similarly a large garrison was locked up to secure Vladivostock against enterprises rendered possible by the Japanese acquisition of command of the local sea communications.

Russia was therefore obliged to accept defeat from a weaker nation, who through careful preparation and sound organization—which go far to ensure success in war—and with the help of judicious alliances, was able to beat a more powerful rival.

Neither wealth, resources, numbers of population, nor even armed force, are therefore decisive factors in war. More important than these are foresight, preparation, and organization.

Russia's policy of expansion was not national, it was rather the policy of a few ambitious men. The support of the nation, an important item in war, was therefore lacking, and the soldiers went to the front unwillingly or even under compulsion.

Consequently, though the Russians fought well, they fought without enthusiasm, and their generals could not rely on this factor. The Japanese people on the other hand entered heart and soul into the contest, inspiring their soldiers to noble deeds.

The influence of the almost unbroken series of defeats and victories which fell to the lot of the combatants is shown in their general attitude and moral during battle.

The Russian soldiers who became accustomed to the idea of falling back when things began to go ill, were in the end too ready to retire when the enemy's fire became severe. The Japanese having discovered by experience that victories are gained by men who will not admit that they are beaten, won many a fight through sheer doggedness and obstinacy,

because the soldiers felt that if only they could hold on the enemy would certainly give way.

The difficulty of remedying errors in initial deployment is clearly shown by the course of the campaign. The Russians never overcame the original drawback of their local weakness; the Japanese laboured throughout under the disadvantage inherent in the false strategy of pursuing a double objective, when not in possession of great preponderance of force.

The Japanese plan was faulty in that effort was not concentrated against the most important objective, whilst the projects were somewhat beyond the capacity of the national resources.

The power of resistance possessed by the Russian troops quartered in Manchuria was moreover perhaps esteemed too lightly, whilst the capacity of the Trans-Siberian railway was also undervalued.

Nor was war declared at the most favourable moment, from a military and meteorological point of view.

Want of foresight too was displayed in not sufficiently discounting the influence of the climatic and topographical conditions in Manchuria, which undoubtedly delayed the Japanese operations to the advantage of the Russians.

Still, vigorous execution enabled the nation to achieve a considerable success; the movements of the armies were successfully co-ordinated in such a manner as to afford one another support; and the menace of the 1st army to the Russian line of communication produced the expected effect.

The whole course of the operations in fact again shows that it is not so much ability to plan as resolution to carry through, that is required to make successful war; though, naturally, a good plan well executed is the ideal to be attained.

Command of the sea also proved a valuable asset to Japan, in forcing Russia to guard strongly the fortress of

Vladivostock, and in causing her generals to disseminate the troops in Manchuria.

The value and importance of the initiative is another lesson of the war.

He who is obliged to follow the enemy's lead ceases to be a free agent, a fact which adversely affects his judgment, rendering him weak and vacillating.

The initiative does not belong in perpetuity to the assailant, to him who first attacks, for the defender by an early counter-stroke may reverse the positions.

Circumstances will not always permit a belligerent to attack first, but it is to be remembered that the longer the initiative is left to the opponent, the greater become his chances of success.

The strong and weak points of enveloping strategy stand out clearly. There is no magic calculated to ensure success in enveloping strategy, that is in converging movements on several lines of operation. Far from it this form of war is the most hazardous, and the general who adopts exterior lines, deliberately or of necessity separates his forces, affording the opponent the desired opportunity of beating them in detail.

Converging movements favour envelopment, and envelopment if successful is decisive, a fact which tempts commanders to run great risks for its attainment.

War would be fairly easy were the game played even blindfold on a chessboard; with no factors of weather or topography to disturb calculations; with men of wood not delicate human beings with which to make moves; and with accurate knowledge of the enemy's dispositions.

It is the presence of these disturbing elements that makes war so difficult an art; for even in countries with settled climates the influence of weather on the health of the men or on the mobility of the army, may at any moment prejudice the best-laid plans.

A more variable factor even than weather is human nature, and if a wide margin must be allowed for the

effect of climate, a wider is required to discount human eccentricities.

If ignorance of the enemy's position and movements be added to the plot, it is clear that no plan of operations not simple and elastic has great chance of success.

Kuropatkin's wavering attitude may have and probably did influence that of his subordinate generals, but it cannot be said that they executed his plans with the spirit he had the right to expect. Yet generous co-operation is one of the foundations of success in war.

It is not, at present, easy to say how much or how little either commander was influenced by political pressure, and to what extent the course to be pursued was dictated from localities far from the seat of war.

The general policy to be followed in war rests with the National Government, but interference in the details of the conduct of a campaign cannot but lead to disaster, as history has shown time and again.

Though formalism spells ruin, men unless carefully schooled against this fault, often vainly seek to solve by rule the difficulties and dilemmas of war. This tendency to act according to rule rather than principle was observable on both sides, with results that were often unfortunate.

Training for war is an important part of peace preparation, but is perhaps the most difficult portion of what may be called peace strategy. This is due to the innate conservatism of human nature which prompts officers and men to dislike the trouble of changing methods in which they have been trained, and which may in the past have stood the test of war; to the fact that it is not possible in peace to pronounce definitely on the influence that will be exercised by improvements in armament; and to the unwillingness of governments and nations to pay the heavy premiums required to ensure efficiency.

The Russians certainly, the Japanese in some degree, were consequently found behind modern requirements in

their training, and both paid for their fault by useless sacrifice of life.

A lesson of this war is that if a sound plan vigorously executed is the foundation, good information is the keystone of military success. An efficient service of intelligence cannot be improvised, it must be manned by those whose minds have been trained in these matters. Of this the Japanese were aware, and though in some respects their topographical information was faulty, their intelligence service in Europe, combined with a local system of spies, who were assisted by the friendly Chinese population, appears usually to have afforded early and accurate news of the enemy's dispositions and intentions.

The Russian intelligence department is said to have been ill organized; and it is even stated that few if any officers at Russian headquarters were able to read the Japanese writing, and that documents which fell into their hands could not therefore be deciphered.

In contrast too to the silence of the Japanese press, the Russian newspapers published details of the mobilisation of troops, and the despatch of reinforcements, which laid bare to the enemy the strength of the opposing army.

Lastly, the great difficulty of war is demonstrated by the failure of the Russian leader in this campaign.

Kuropatkin was an able officer as judged by ordinary standards. To those who knew him he appeared a clever man, well versed in the theory of the art of war. He was reckoned resolute, he possessed much of that war experience which is rated so high, and had distinguished himself on service.

He seemed therefore to possess the qualifications required in a general. Yet he failed. The weight of responsibility was too great for him, and in reality he lacked the character to carry through his plans, and to dominate the wills of his subordinates and of his opponent.

Character may be an inborn quality, as is strength of arm, or swiftness of foot, but character can be formed and

developed, and "to teach taste is inevitably to form character." The soldier then who strives unceasingly to improve his knowledge and judgment, who faces difficulties boldly, and whose actions are guided by the principle that "nothing has been done whilst anything remains undone, and that to fail is better than not to attempt," will have made a great stride towards the formation of a character fit to take command, should fortune so shape the career.

APPENDIX I

RUSSIAN ORGANIZATION

A Normal Army Corps consisted of—

Two infantry divisions, one cavalry division, corps engineers, and administrative services.

An Infantry Division included—

Two brigades, each of two, four-battalion regiments, each battalion including at most from 800–900 rifles; one artillery brigade of six or eight batteries, each of eight guns; and an engineer company.

A cavalry division comprised two brigades, each of two, six-squadron regiments, with two, six-gun horse batteries. Total: 3000–3500 sabres or lances, and 12 guns.

Total strength of an army corps was at highest about 28,000 rifles, 3400 sabres, 124 guns.

Of the corps that took part in the war, the following, which belonged to the active European army, were approximately of the above strength: 1st, 4th, 10th, 16th, 17th.

The 5th and 6th Siberian Corps were composed of European reserve units, and at best numbered 28,000 rifles and 96 guns.

The 4th Siberian Corps was made up of Siberian reserve units, and possessed at most 28,000 rifles and 64 guns.

The 2nd Siberian Corps included East Siberian troops and reserve units, strength at highest 27,000 rifles and 80 guns.

The 1st and 3rd Siberian Corps were formed in Eastern Siberia before the war, and numbered about 22,000 rifles and 64 guns.

None of the Siberian corps had special corps cavalry, but Cossack divisions, and smaller units, were attached to them as required.

ARMAMENT.—That of the artillery was of a heterogeneous nature. About one-third of the field batteries possessed a modern 3 in. Q.F. gun, with shield, firing a practically smokeless powder, and throwing a shrapnel up to 6000 yards with time fuse, and 7000 yards with

percussion fuse. The remainder of the field guns were principally muzzle-loading weapons, of 3·42 calibre. There were a few mountain guns, and a proportion of heavy artillery and howitzers.

The cavalry carried sword, a rifle similar to that of the infantry, sometimes a bayonet, and the front rank had also usually a lance. Of rifle ammunition, 45 rounds were on the man, and 24 rounds in the regimental transport.

The infantry weapon was a ·299 charger-loading rifle, each charger holding five cartridges. The rifle was sighted to 3000 yards, and weighed nine pounds. Each man nominally carried 120 rounds in his pouches, bandolier, and kit bag, and there were 66 rounds per rifle in the regimental carts. Actually 200-300 rounds were taken by the men into action.

EQUIPMENT AND RATIONS.—Each infantryman had usually on his person biscuit and salt for two and a half days, and carried a great coat and a portion of a shelter tent, and eighty men per company were equipped with spades. The total weight carried by the infantry soldier, including clothing, was 70 pounds.

Of reserve rations, there were in Vladivostock and district at the beginning of the war, three months' supplies; in the Port Arthur command, twelve months' food; and eight months' in the Siberian military district.

ENGINEERS.—Pontoon units had from 300-400 yards of bridging material, and many engineer companies possessed a light field park.

The European companies had forty miles of cable and wire, and there were four East Siberian telegraph companies, each with sixteen miles of wire. There were also, in the army, three telegraph companies with Marconi wireless equipment, for maintenance of communication between the commander-in-chief and army commanders.

MACHINE GUNS.—Several divisions had four-gun machine-gun companies.

MOUNTED SCOUTS.—Most divisions possessed companies of mounted scouts.

APPENDIX II

JAPANESE ORGANIZATION

The army was organized on a territorial system. There were thirteen districts, each furnishing one division, and one Kobi brigade.

Four new divisions, and Kobi brigades, were raised in 1904.

A division included two brigades, each of two, three-battalion regiments, the battalion numbering some 950 rifles; one cavalry regiment; six, six-gun batteries; one battalion of engineers, with a bridging train; one telegraph company; five ammunition columns; four supply columns; six field hospitals.

Total establishment: 11,400 rifles, 600 sabres, 36 guns, 750 engineers, 5500 others.

The 5th, 8th, 9th, 10th, 11th, and 12th divisions had mountain guns only; the 7th division had only four batteries, two being of field and two of mountain guns; the remainder possessed field guns.

A Kobi brigade consisted of two, two-battalion regiments, and numbered 3500 rifles.

A mixed Kobi brigade was composed of one infantry brigade of two, two-battalion regiments; three batteries; and one company of engineers. Total: 5000 rifles, 7 sabres, 18 guns, 280 engineers.

An artillery brigade consisted of three regiments, each of six, six-gun batteries.

A cavalry brigade comprised two regiments, of four squadrons each.

ARMAMENT.—The field and mountain guns were of the same calibre—2.95 inches. Both fired a practically smokeless powder, and the field gun ranged to about 5000 yards. After the Sha Ho battle, the field guns were provided with shields.

There were batteries of 4.72 howitzers, and heavy guns of various kinds.

The artillery carried both shrapnel, and high explosive shell.

The cavalry were armed with a sword, and with a carbine sighted to 1500 yards. 90 rounds of ammunition were carried by each man.

The infantry possessed a rifle of .256 calibre, sighted to 2200 yards, weighing about eight and a half pounds, and loaded by means of a charger carrying five cartridges.

Of ammunition, 200 rounds were supposed to be on the man, and 60 rounds on the ammunition mules.

RATIONS, ETC.—Each man had, on his person, two days' rations; and two-thirds of the men carried an intrenching tool strapped to the knapsack. The total weight of arms and equipment was about 57 pounds, or 65 pounds including clothes.

ENGINEERS.—The bridging sections possessed 153 yards of bridge, and a telegraph section had 35 miles of air line and cable.

MACHINE GUNS.—In 1904-5 each division was given fourteen Hotchkiss guns. These were organized into two six-gun batteries, and one two-gun section.

APPENDIX III

TABLES SHOWING THE APPROXIMATE DISPOSITIONS AND NUMBERS OF THE ARMIES

COMBATANT TROOPS, LESS ARTILLERYMEN

JAPANESE

BEGINNING OF FEBRUARY, 1904.

Guard, Guard Kobi brigade . . .	Tokio.
1st division, 1st Kobi brigade . . .	Tokio.
2nd division, 2nd Kobi brigade . . .	Sendai.
3rd division, 3rd Kobi brigade . . .	Nagoya.
4th division, 4th Kobi brigade . . .	Osaka.
5th division, 5th Kobi brigade . . .	Ujina.
6th division, 6th Kobi brigade . . .	Kumatoto.
7th division, 7th Kobi brigade . . .	Hokkaido.
8th division, 8th Kobi brigade . . .	Hirosaki.

JAPANESE (*continued*)

9th division, 9th Kobi brigade . . . Kanazawa.

10th division, 10th Kobi brigade . . . Hijemi.

11th division, 11th Kobi brigade . . . Marugame.

12th division, 12th Kobi brigade . . . Kokura.

Two cavalry brigades.

Two artillery brigades.

Depot troops.

Grand total: 245,000 rifles, 12,500 sabres, 804 guns, 12,750 engineers.

RUSSIANS

Vladivostock (Ussuri) district

BEGINNING OF FEBRUARY, 1904.

1st, 2nd, 5th, 6th, 8th East Siberian rifle brigades.

2nd brigade of the 31st division.

2nd brigade of the 35th division.

Two regiments of cavalry.

One engineer battalion.

Fourteen batteries

Fortress troops.

Railway troops.

	Rifles.	Sabres.	Guns.
Field troops	36,000	1,500	112
Fortress troops	4,500	—	—
Railway troops	3,500	—	—
Total	44,000	1,500	112

Kuan-tung peninsula

3rd, 4th, and 7th East Siberian rifle brigades (less two regiments).

5th East Siberian rifle regiment.

One Cossack regiment.

2½ engineer battalions.

Five batteries.

Fortress troops.

	Rifles.	Sabres.	Guns.
Field troops	17,000	700	40
Fortress troops	2,500	—	—
Total	19,500	700	40

RUSSIANS (*continued*)*Southern Manchuria*

9th East Siberian rifle brigade.

Three infantry regiments.

Seventeen squadrons.

Two batteries.

Railway troops.

	Rifles.	Sabres.	Guns.
Field troops . . .	14,000	2,000	12
Railway troops . . .	7,500	—	—
Total . . .	21,500	2,000	12

In the Trans-Baikal district

Rifles.	Guns.
3,000	32

Grand total.	Rifles.	Sabres.	Field Guns.
Field troops . . .	70,000	4,200	196
Fortress troops . . .	7,000	—	—
Railway troops . . .	11,000	—	—
Frontier guards . . .	13,500	8,000	48
Total . . .	101,500	12,200	244

APPENDIX IV

JAPANESE

South of Wi-ju, and Chyang-syong

END OF APRIL.

1st army, General Baron Kuroki.

Guard division.

2nd division.

12th division.

	Rifles.	Sabres.	Guns.	Engineers.
Total . . .	33,500	1,000	126	800

JAPANESE (*continued*)*Chin-am-pho*

Under General Oku, in transports.

1st division.

3rd division.

4th division.

Half an artillery brigade.

	Rifles.	Sabres.	Guns.	Engineers.
Total . .	33,500	1,000	162	800
Grand total .	67,000	2,000	288	1,600

RUSSIANS.

Towards Shan-hai-kuan

END OF APRIL.

	Rifles.	Sabres.
General Kossagovski.	1,400	250

Neighbourhood of Liao-Yang, Mukden, etc.

5th East Siberian rifle division.

1st Siberian infantry division.

One brigade 10th corps.

One brigade 17th corps.

Detached units.

Trans-Baikal Cossack division.

Twelve squadrons Cossacks.

Six companies engineers.

	Rifles.	Sabres.	Guns.
Total . .	31,500	4,300	124

Near Ta-shih-chiao and Ying-kou

1st and 9th East Siberian rifle divisions.

Six squadrons dragoons.

One battalion engineers.

Te-li-ssu, and Pu-lan-tien

One brigade, five squadrons, and one horse battery.

	Rifles.	Sabres.	Guns.
Total . .	17,000	700	70

RUSSIANS (*continued*)*Near An-tung, some cavalry towards Ta-ku-shan*

Lieutenant-General Zasulitch.

3rd and 6th East Siberian divisions.

Mischenko's Cossacks.

	Rifles.	Sabres.	Guns.
Total . .	16,500	3,000	78

East of Kuan-tien-cheng

Colonel Madridov.

Two squadrons and two companies of mounted scouts.

Port Arthur, and neighbourhood

4th East Siberian rifle division.

7th East Siberian rifle division.

Two companies engineers.

Three battalions fortress troops.

One squadron.

	Rifles.	Sabres.	Field Guns.	Fortress Guns.	Engineers.
Total .	27,000	120	66	518	450

Vladivostock and district

2nd East Siberian rifle division.

8th East Siberian rifle division.

Ussuri cavalry brigade.

Fortress troops.

	Rifles.	Sabres.	Field Guns.
Total . .	14,500	1,000	12

	Rifles.	Sabres.	Field Guns.	Fortress Guns at Port Arthur.
Field troops .	66,400	8,500	272	—
In fortresses .	41,500	1,120	78	—
Railway and Frontier troops	24,500	8,000	48	—
Grand total .	132,400	17,620	398	518

APPENDIX V

JAPANESE

Feng-huang-cheng, and Ai-yang-cheng

28TH MAY

1st army, General Baron Kuroki.

Guard division.

2nd division.

12th division.

	Rifles.	Sabres.	Guns.	Engineers.
Total . . .	30,000	1,000	128	2,000

Nan-shan, Pu-lan-tien, Ta-sha river, and Yen-tai

2nd army, General Baron Oku.

1st division.

3rd division.

4th division.

5th division.

11th division, disembarking at Yen-tai.

1st cavalry brigade.

An artillery brigade (less one regiment).

	Rifles.	Sabres.	Guns.	Engineers.
Total . . .	55,000	3,200	234	4,000

Ta-ku-shan

Nucleus of the 4th army.

10th division.

	Rifles.	Sabres.	Guns.	Engineers.
Total . . .	11,000	400	36	300
Grand total . . .	96,000	4,600	398	6,300

RUSSIANS

Towards Shan-hai-kuan

28TH MAY.

General Kossogovski.

Rifles.	Sabres.
1,400	250

RUSSIANS (*continued*)*Liao-Yang and Mukden*

5th East Siberian rifle division.
 2nd brigade 31st division, 10th corps.
 2nd brigade 35th division, 17th corps.
 Portions of 2nd and 3rd Siberian reserve divisions.
 Various Cossack and artillery units.

	Rifles.	Sabres.	Guns.
Total . . .	37,000	4,000	118

Ying-kou, Kai-ping, Hai-cheng, and neighbourhood

Lieutenant-General Stackelberg.
 1st East Siberian rifle division.
 9th East Siberian rifle division.
 Part of 2nd Siberian reserve division.

South of Wa-fang-tien

Major-General Samsonov's cavalry.

	Rifles.	Sabres.	Guns.
Total . . .	27,500	2,800	100

Lien-shan-kuan, Erh-chia-pu-tzu, Ta-wan, Lang-tzu-shan.

Lieutenant-General Count Keller.
 3rd East Siberian rifle division.
 6th East Siberian rifle division.
 Part of 2nd Siberian reserve division.
 One Cossack regiment and horse battery.

Rifles.	Sabres.	Guns.
21,000	600	76

Sai-ma-chi

Major-General Rennenkamf.

Rifles.	Sabres.	Guns.
2,100	3,000	14

East of Sai-ma-chi

Lieutenant-Colonel Madridov.

Rifles and Sabres.
700

RUSSIANS (*continued*)*Hsiu-yen, Hsi-mu-cheng, and neighbourhood*

Major-General Mischenko.

Rifles.	Sabres.	Guns.
4,000	3,000	6

Port Arthur and Nan-shan

Lieutenant-General Stoessel.

Rifles.	Sabres.	Field Guns.	Fortress Guns.
27,000	120	66	518

Vladivostock

Lieutenant-General Linevitch.

Rifles.	Sabres.	Field Guns.
22,000	3,600	64

	Rifles.	Sabres.	Field Guns.	Fortress Guns at Port Arthur.
Field troops .	93,500	13,850	300	—
In fortresses .	49,000	3,720	130	—
Railway and frontier guards	34,300	8,000	48	—
Grand total	176,800	25,570	478	518

APPENDIX VI

JAPANESE

Feng-huang-cheng and Ai-yang-cheng

15TH JUNE

1st army, General Baron Kuroki.

Guard division (less Asada brigade).

2nd division.

12th division.

	Rifles.	Sabres.	Guns.	Engineers.
Total . .	25,000	1,000	116	2,500

JAPANESE (*continued*)*North of Ta-ku-shan and at Hsiu-yen*

Nucleus of 4th army, General Kawamura.

10th division.

Asada brigade of Guards.

	Rifles.	Sabres.	Guns.	Engineers.
Total . .	16,500	400	48	800

Te-li-ssu

2nd army, General Baron Oku.

3rd division.

4th division.

5th division.

1st cavalry brigade.

Artillery brigade.

Rifles.	Sabres.	Guns.	Engineers.
30,000	2,000	216	2,400

6th division (landing).

Rifles.	Sabres.	Guns.	Engineers.
11,400	430	36	830

Advancing on Port Arthur

3rd army, General Baron Nogi.

1st division.

11th division.

	Rifles.	Sabres.	Guns.	Engineers.
Total . .	23,000	430	72	1,600

Grand total .	105,900	4,260	488	8,130
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RUSSIANS

Liao-Yang, and Mukden

15TH JUNE

2nd brigade, 31st division.

1st Siberian division.

5th East Siberian rifle division.

Cossack and artillery units.

	Rifles.	Sabres.	Guns.
Total . .	26,000	2,500	48

RUSSIANS (*continued*)*Ta-shih-chiao, Hai-cheng, Hsi-mu-cheng, and Ying-kou*

Bulk of 4th Siberian corps (2nd and 3rd Siberian reserve divisions).

Cossack units.

	Rifles.	Sabres.	Guns.
Total	17,000	3,500	40

Towards Shan-hai-kuan

General Kossogovski.

	Rifles.	Sabres.	Guns.
Total	1,500	250	8

Feng-shui-ling range

Lieutenant-General Count Keller.

3rd East Siberian rifle division.

6th East Siberian rifle division.

One Cossack regiment.

	Rifles.	Sabres.	Guns.
Total	18,000	350	68

Near Sai-ma-chi

Major-General Rennenkamf.

	Rifles.	Sabres.	Guns.
Total	3,500	2,200	22

Hsing-ching

Lieutenant-Colonel Madridov.

	Rifles.	Sabres.	Guns.
Total	700	1,000	2

South Feng-shui-ling, and neighbourhood

Major-General Mischenko.

Part of the 4th Siberian corps.

Cossacks, and horse guns.

	Rifles.	Sabres.	Guns.
Total	10,500	2,000	24

Te-li-ssu

Lieutenant-General Stackelberg.

1st East Siberian rifle division.

9th East Siberian rifle division.

2nd brigade 35th division.

Cossack units.

	Rifles.	Sabres.	Guns.
Total	27,000	2,200	90

RUSSIANS (*continued*)*Port Arthur*

Lieutenant-General Stoessel.

Garrison, naval detachments, and town guard.

	Rifles.	Sabres.	Field Guns.	Fortress Guns.
Total . . .	32,000	120	66	458

Vladivostock

Lieutenant-General Linevitch.

	Rifles.	Sabres.	Guns.
Total . . .	22,000	3,600	64

	Rifles.	Sabres.	Field Guns.	Fortress Guns.
Field troops . . .	104,200	14,000	302	—
In fortresses, etc.	54,000	3,720	130	—
Railway, etc., guards . . .	34,300	8,000	48	—
Grand total . . .	192,500	25,720	480	458

APPENDIX VII

JAPANESE

Mo-tien-ling, and Pa-li-ling

30TH JUNE

1st army, General Baron Kuroki.

Guard division (less Asada brigade).

2nd division.

12th division.

	Rifles.	Sabres.	Guns.	Engineers.
Total . . .	25,000	1,000	116	2,500

JAPANESE (*continued*)*South Feng-shui-ling*

Nucleus of 4th army, General Kawamura.

10th division.

Asada brigade of Guards.

10th Kobi brigade at Ta-ku-shan.

	Rifles.	Sabres.	Guns.	Engineers.
Total . .	21,000	600	48	1,000

Hsiung-yao-cheng

2nd army, General Baron Oku.

3rd division.

4th division.

5th division.

6th division.

1st cavalry brigade.

An artillery brigade.

	Rifles.	Sabres.	Guns.	Engineers.
Total . .	41,000	2,400	252	3,200

Ken-shan

3rd army, General Baron Nogi.

1st division.

11th division.

1st Kobi brigade.

Naval brigade.

	Rifles.	Sabres.	Guns.	Engineers.
Total . .	28,000	450	72	1,600
Grand total	115,000	4,450	488	8,300

RUSSIANS

Liao-Yang, and Mukden

30TH JUNE

Various detachments.

Rifles.	Sabres.	Guns.
8,000	1,500	14

Harbin, and Kirin

Garrisons.

Rifles.	Sabres.	Guns.
3,000	400	8

RUSSIANS (*continued*)*Towards Shan-hai-kuan*

General Kossogovski.

Rifles.	Sabres.	Guns.
1,500	250	8

Chiao-tao, and Pa-li-ling

Major-General Rennenkamf.

Rifles.	Sabres.	Guns.
3,500	2,200	26

West of Mo-tien-ling

Lieutenant-General Count Keller.

Portions of the 3rd and 6th East Siberian rifle divisions
Cossacks.

	Rifles.	Sabres.	Guns.
Total . . .	8,500	600	24

On route to join Keller, two regiments, etc.

Rifles.	Guns.
4,500	24

Hsing-ching

Lieutenant-Colonel Madridov.

Rifles.	Sabres.	Guns.
700	1,000	2

Tang-chi, and south of Hsi-mu-cheng

Major-General Mischenko.

One brigade of 4th Siberian corps.

2nd brigade 35th division.

Part of 31st division.

Cossacks and horse guns.

	Bayonets.	Sabres.	Guns.
Total . . .	16,000	1,800	72

Hsi-mu-cheng

Lieutenant-General Zasulitch.

Portions of 5th East Siberian rifle division.

Cossacks, and horse guns.

	Rifles.	Sabres.	Guns.
Total . . .	10,500	1,500	46

RUSSIANS (*continued*)*South of Kai-ping*

Major-General Samsonov.

Sabres.	Guns.
3,000	12

Kai-ping, and Ying-kou

Lieutenant-General Stackelberg.

1st East Siberian rifle division.

9th East Siberian rifle division.

Detachments.

Cossacks and horse guns.

	Rifles.	Sabres.	Guns.
Total . . .	29,000	750	50

Hai-cheng, and Ta-shih-chiao

Lieutenant-General Zarubaiev.

Portions of 4th Siberian and other corps.

Cossacks.

	Rifles.	Sabres.	Guns.
Total . . .	20,000	800	40

	Rifles.	Sabres.	Field Guns.	Fortress Guns.
Field troops . .	105,200	13,800	326	458
In fortresses, etc.	54,000	4,120	130	
Railway and frontier guards . . .	34,300	8,000	48	
	193,500	25,920	504	458

APPENDIX VIII

JAPANESE

*Attacking the Russian positions at Yu-shu-ling, Pien-ling, and
Ta-wan*

31st JULY

1st army, General Baron Kuroki.

Guard division.

2nd division.

12th division.

Umezawa brigade.

	Rifles.	Sabres.	Guns.	Engineers.
Total . . .	36,000	1,000	114	2,000

JAPANESE (*continued*)*South of Hsi-mu-cheng*

4th army, General Count Nodzu.

5th division.

10th division.

10th Kobi brigade.

Detachment of 3rd division.

	Rifles.	Sabres.	Guns.	Engineers.
Total . .	26,000	850	84	2,000

Ta-shih-chiao, and south of Hai-cheng

2nd army, General Baron Oku.

3rd division.

4th division.

5th division.

1st cavalry brigade.

Artillery brigade.

	Rifles.	Sabres.	Guns.	Engineers.
Total . .	33,000	2,400	216	2,400

Besieging Port Arthur

3rd army, General Baron Nogi.

1st division.

9th division.

11th division.

1st and 4th Kobi brigades.

Naval brigade.

Siege train.

	Rifles.	Sabres.	Guns.	Engineers.
Total . .	45,000	450	220	1,600
Grand total .	140,000	4,700	634	8,000

RUSSIANS

Near Kou-pang-tzu

31st JULY

Rifles.	Sabres.	Guns.
1,500	250	8

Liao-Yang, Mukden, Kirin, Harbin

Garrison and drafts.

Rifles.	Sabres.	Guns.
25,500	2,100	24

RUSSIANS (*continued*)*An-ping, Yu-shu-ling, and Pien-ling*

Lieutenant-General Sluchevski.

10th corps (9th and part of 31st division).

North of Yu-shu-ling

General Luibavin's detachment.

Trans-Baikal Cossack brigade.

	Rifles.	Sabres.	Guns
Total . . .	20,000	3,500	98

Ta-wan, in Lan valley

Lieutenant-General Count Keller.

3rd East Siberian rifle division.

6th East Siberian rifle division.

	Rifles.	Sabres.	Guns.
Total . . .	17,000	300	68

Pen-hsi-hu

Colonel Grulev.

	Rifles.	Sabres.	Guns.
	3,500	500	6

East of Pen-hsi-hu

Lieutenant-Colonel Madridov's and other detachments.

	Rifles.	Sabres.	Guns.
	1,500	1,000	2

Hai-cheng

Lieutenant-General Stackelberg.

1st Siberian corps (1st and 9th East Siberian rifle divisions).

Lieutenant-General Zarubaiev.

4th Siberian corps (2nd and 3rd Siberian reserve divisions).

Siberian Cossack division.

	Rifles.	Sabres.	Guns.	Engineers.
Total . . .	34,500	3,000	100	350

Hsi-mu-cheng

Lieut.-General Zasulitch.

5th East Siberian division.

2nd and 3rd Siberian infantry divisions.

31st division.

Mischenko's cavalry.

	Rifles.	Sabres.	Guns.
Total . . .	25,500	4,000	86

RUSSIANS (*continued*)

	Rifles.	Sabres.	Field Guns.	Fortress Guns.
Field troops .	129,000	14,650	392	458
In fortresses, etc. .	54,000	4,000	130	—
On railways, etc. .	34,300	8,000	48	—
	217,300	26,650	570	458

APPENDIX IX

JAPANESE

East of the ridge dividing the lower portions of the Lan and Tang rivers

25TH AUGUST

1st army, General Baron Kuroki.

Guard division.

2nd division.

12th division.

Umezawa brigade.

A Kobi regiment.

	Rifles.	Sabres.	Guns.	Engineers.
Total . . .	45,000	1,500	120	3,000

Shan-in-tzai, and towards Hai-cheng

4th army, General Count Nodzu.

5th division.

10th division.

10th Kobi brigade.

	Rifles.	Sabres.	Guns.	Engineers.
Total . . .	33,000	1,000	72	1,700

Between Hai-cheng and An-shan-chan.

2nd army, General Baron Oku.

3rd division.

4th division.

6th division.

11th Kobi brigade.

Artillery brigade.

1st cavalry brigade.

	Rifles.	Sabres.	Guns.	Engineers.
Total . . .	47,000	2,500	278	2,800

Total field force . 125,000 5,000 470 7,500

JAPANESE (*continued*)*Besieging Port Arthur*

3rd army, General Baron Nogi.

	Rifles.	Sabres.	Field Guns.	Siege Guns.	Engineers.
	40,000	450	180	220	3,000
Grand total	165,000	5,450	650	220	10,500

RUSSIANS

Towards Ta-wan, on Liao R.

25TH AUGUST

General Kossogovski.

Rifles.	Sabres.	Guns.
2,500	1000	4

Ching-ho-cheng, Upper Tai-tzu, and Hsing-ching

Colonel Madridov.

Rifles.	Sabres.	Guns.
1,500	120	2

Mulden, Kirin, Harbin

5th Siberian corps, and part of 1st corps.

Rifles.	Sabres.	Guns.
20,000	350	48

Tai-tzu R., Kung-shan-ling, An-ping, Lang-tzu-shan, etc.

General Bilderling.

10th European corps (9th and 31st divisions, General Sluchevski).

3rd Siberian corps (3rd and 6th East Siberian rifle divisions,
General Ivanov).

17th European corps (3rd and 35th divisions, General Bilderling).

2nd cavalry brigade (General Luibavin).

	Rifles.	Sabres.	Guns.
Total . . .	60,000	5,200	260

RUSSIANS (*continued*)*An-shan-chan, and neighbourhood*

Under General Zarubaiev	Lieutenant-General Stackelberg.
	1st Siberian corps (1st and 9th East Siberian rifle divisions)
	Lieutenant-General Zaslitch.
	5th East Siberian rifle division.
	Lieutenant-General Zarubaiev.
	4th Siberian corps (2nd and 3rd Siberian reserve divisions).
	Trans-Baikal Cossack brigade.
	Ural Cossack brigade.
	Siberian Cossack division.
	General Grekov's cavalry.
	Two mixed detachments maintained communication with Bilderling's force.

	Rifles.	Sabres.	Guns.
Total . .	50,000	8,000	160

Liao-Yang and neighbourhood

	Rifles.	Sabres.	Guns.
Total . .	15,000	350	80

	Rifles.	Sabres.	Field Guns.	Fortress and Naval Guns.
Field troops .	149,000	15,020	554	586
Fortresses, etc. .	47,500	4,000	130	—
Railway, etc. .	34,300	8,000	48	—
	230,800	27,020	732	586

APPENDIX X

JAPANESE

South of Yen-tai coal mines, Pien-nu-lu-pu, etc.

BEGINNING OF OCTOBER.

1st army, General Baron Kuroki.

Guards division.

2nd division.

12th division.

Umezawa's brigade.

29th Kobi regiment

2nd cavalry brigade.

	Rifles.	Sabres.	Guns.	Engineers
Total . .	40,000	2,500	120	2,000

JAPANESE (*continued*)*La-ni-pu to Nan-tai, but bulk still south of the Tai-tzu*

4th army, General Count Nodzu.

5th division.

10th division.

	Rifles.	Sabres.	Guns.	Engineers.
Total . .	20,000	400	72	1,400

Nan-tai to Shan-tai-tzu, but some troops still south of the Tai-tzu

2nd army, General Baron Oku.

3rd division.

4th division.

6th division.

1st cavalry brigade.

	Rifles.	Sabres.	Guns.	Engineers.
Total . .	30,000	2,500	114	2,000

General reserve. *Near Liao-Yang*

3rd Kobi brigade.

5th Kobi brigade.

10th Kobi brigade.

11th Kobi brigade.

One artillery brigade.

Other artillery units.

	Rifles.	Sabres.	Guns.	Engineers.
Total . .	25,000	—	228	—
Total field force	115,000	5,400	534	5,400

Besieging Port Arthur

3rd army, General Baron Nogi

	Rifles.	Sabres.	Field Guns.	Siege Guns.	Engineers.
Total. .	45,000	450	180	220	3,500
Grand total.	160,000	5,850	714	220	8,900

RUSSIANS

*Advancing on and between the Fu-shun to Wei-ning-ying, and
the Fushing to Pien-nu-lu-pu roads*

BEGINNING OF OCTOBER.

Eastern force.

Lieutenant-General Stackelberg.

1st Siberian corps (1st and 9th East Siberian rifle divisions).

2nd Siberian corps (5th East Siberian rifle division, and part
of 54th division).

3rd Siberian corps (3rd and 6th East Siberian rifle divisions).

General Samsonov's Sib Cossack division.

RUSSIANS (*continued*)*Moving on Hsiao-chia-ho-tzu*

General Rennenkamf's detachment (13 battalions, 16 squadrons, 30 guns).

	Rifles.	Sabres.	Guns.	Engineers.
Total . . .	60,000	6,000	200	1,500

Guarding left flank as far as Sai-ma-chi and Hsing-ching road

Colonel Madridov.

	Rifles.	Sabres.	Guns.
	1,000	400	2

Guarding right flank as far as Liao river

	Rifles.	Sabres.	Guns.
General Kossogovski . . .	5,000	1,000	16

Advancing southwards astride the railway

Western force.

General Bilderling.

10th army corps (9th and 31st divisions).

17th army corps (3rd and 35th divisions).

General Grekov's Ural and Orenburg Cossack division.

West of the Hun Ho

General Dembovski's detachment (12 battalions, 16 squadrons, 32 guns, 2 battalions engineers).

	Rifles.	Sabres.	Guns.	Engineers.
Total . . .	50,000	7,500	222	2,000

South of Mukden

General reserve.

4th Siberian corps (2nd and 3rd Siberian reserve divisions).

1st corps (22nd and 37th divisions).

6th Siberian corps (55th and 72nd divisions).

In touch with enemy

Mischenko's Trans-Baikal Cossack brigade (11 squadrons, 8 guns).

	Rifles.	Sabres.	Guns.	Engineers.
Total . . .	55,000	2,000	304	1,500

	Rifles.	Sabres.	Field Guns.	Fortress and Naval Guns.
Field troops . . .	171,000	16,900	744	546
Fortresses, etc.	45,000	4,000	130	—
Railways, etc. . .	34,000	8,000	48	—
	250,000	28,900	922	546

APPENDIX XI

(See Map 11)

JAPANESE

From south of Hua-ling to Tang-how

15TH JANUARY, 1905.

1st army, General Baron Kuroki.

Guard division.

2nd division.

12th division.

Umezawa brigade.

Two Kobi brigades.

Artillery.

	Rifles.	Sabres.	Guns.	Engineers.
Total . .	48,000	1,200	180	3,000

Pu-tsao-yai to Putilov hill

4th army, General Count Nodzu.

10th division.

Two or three Kobi brigades.

Artillery.

	Rifles.	Sabres.	Guns.	Engineers.
Total . .	25,000	600	96	450

*Ku-chia-tzu to west of Ta-tai**Cavalry to Hei-kou-tai*

2nd army, General Baron Oku.

3rd division.

4th division.

6th division.

1st cavalry division.

Artillery.

	Rifles.	Sabres.	Guns.	Engineers.
Total . .	33,000	2,400	204	2,400

JAPANESE (*continued*)*East of Pen-hsi-hu*

2nd cavalry brigade.

Sabres.
1,500Guns.
6*Near Yen-tai station, and at Lang-tung-kou*

General reserve.

5th division.

8th division.

Four or five Kobi brigades.

	Rifles.	Sabres.	Guns.	Engineers.
Total . . .	40,000	800	108	850
Total field force .	146,000	6,500	594	6,700

At or moving from Port Arthur

3rd army, General Baron Nogi.

1st division.

7th division.

9th division.

11th division.

1st and 4th Kobi brigades.

Naval brigade.

Siege train.

	Rifles.	Sabres.	Field Guns.	Siege Guns.	Engineers.
Total . . .	48,000	450	216	235	4,000
Grand total .	194,000	6,950	810	235	10,700

RUSSIANS.

South-east of Mukden

15th JANUARY, 1905.

1st army, General Linevitch.

1st corps (22nd and 37th divisions).

2nd Siberian corps (5th East Siberian division, and 1st Siberian division).

3rd Siberian corps (3rd East Siberian division, and part of 78th division).

4th Siberian corps (2nd and 3rd Siberian reserve divisions).

RUSSIANS (*continued*)*Thirty miles east of Pen-hsi-hu*

General Alexiev's detachment.

Portions of 6th East Siberian, and of 71st divisions.

Part of Trans-Baikal Cossack brigade.

	Rifles.	Sabres.	Guns.	Engineers.
Total . .	95,000	6,000	320	2,500

Hsing-ching

Colonel Madridov's force.

	Rifles.	Sabres.	Guns.
	700	600	4

Connecting Alexiev, and Madridov

General Maslov's detachment.

	Rifles.	Sabres.	Guns.
	3,000	200	2

West of Putilov hill, to Chi-tai-tzu

3rd Army, General Kaulbaur's.

6th Siberian corps (55th division and Orenburg Cossacks).

17th corps (3rd and 35th divisions).

5th Siberian corps (54th and 61st divisions).

	Rifles.	Sabres.	Guns.	Engineers.
Total . .	65,000	2,000	400	2,000

San-chia-tzu, to Chan-tan

2nd army, General Gripenberg.

1st Siberian corps (1st and 9th East Siberian divisions).

8th corps (14th and 15th divisions).

10th corps (9th and 31st divisions).

Rifle corps (three rifle brigades).

Mischenko's Cossacks.

Western detachment, between the *Hun* and *Liao* rivers, 8 battalions, 21 squads, 20 guns.

	Rifles.	Sabres.	Guns.	Engineers.
Total . .	95,000	9,000	374	2,000

Hun-ho-pu, and Tao-shan-tun

General reserve.

Portions of 16th corps, and of 6th Siberian corps.

Heavy and other artillery.

	Rifles.	Sabres.	Guns.
Total . .	15,000	200	106

RUSSIANS (*continued*)

	Rifles.	Sabres.	Field Guns.
Field troops	273,700	18,000	1,206
Fortresses, etc.	15,000	3,000	80
Railways, etc.	25,000	8,000	48
	313,700	29,000	1,334

APPENDIX XII

JAPANESE

(Map 12)

Between Wei-tzu-yu, and Pao-tzu-yen

20TH FEBRUARY, 1905

5th army, General Kawamura.

11th division.

Three or four Kobi brigades.

	Rifles.	Sabres.	Guns.	Engineers.
Total	25,000	600	72	2,000

From Hua-ling, to south of Feng-chia-pu

1st army, General Baron Kuroki.

Guard division.

2nd division.

12th division.

Umezawa brigade.

5th Kobi brigade.

Artillery, etc.

	Rifles.	Sabres.	Guns.	Engineers.
Total	43,000	1,200	180	3,000

South of Feng-chia-pu, to Ling-shen-pu

4th army, General Count Nodzu.

6th division.

10th division.

Two or three Kobi brigades.

Artillery.

	Rifles.	Sabres.	Guns.	Engineers.
Total	35,000	850	142	1,700

Ling-shen-pu, to Hei-kou-tai

2nd army, General Baron Oku.

4th division.

5th division.

8th division.

Two Kobi brigades.

Artillery.

	Rifles.	Sabres.	Guns.	Engineers.
Total	42,000	1,000	204	3,000

JAPANESE (*continued*)*Yang-chia-wan, Huang-ni-wa, and Hsiao-pei-ho*

3rd army, General Baron Nogi.

1st division.

7th division.

9th division.

Artillery.

	Rifles.	Sabres.	Guns.	Engineers.
Total . . .	35,000	1,200	270	1,400

San-chia-pao, to Shan-ko-yu-shu

1st cavalry brigade.

2nd cavalry brigade.

	Sabres.	Guns.
Total . . .	3,000	12

Shi-li-ho, and Yen-tai station

General reserve.

3rd division.

Three or four Kobi brigades.

	Rifles.	Sabres.	Guns.	Engineers.
Total . . .	25,000	350	42	400
Grand total .	205,000	8,200	922	11,500

RUSSIANS

South-east of Mukden

20TH FEBRUARY, 1905.

1st army, General Linevitch.

1st army corps (22nd and 37th divisions).

2nd Siberian corps (5th East Siberian division and 1st Siberian division).

3rd Siberian corps (3rd East Siberian division and part of 71st division).

4th Siberian corps (2nd and 3rd Siberian divisions).

General Baumgarten's detachment connecting with General Alexiev.

Ching-ho-cheng

General Alexiev's detachment of part of 6th East Siberian and of 71st division, with a portion of Trans-Baikal Cossack brigade.

	Rifles.	Sabres.	Guns.	Engineers.
Total . . .	95,000	6,000	360	2,500

Hsing-ching neighbourhood

Colonel Madridov's force.

Rifles.	Sabres.	Guns.
700	600	4

RUSSIANS (*continued*)*Connecting Alexiev, and Madridov*

General Maslov's detachment.

Rifles.	Sabres.	Guns.
3,000	200	2

South of Mukden

3rd army, General Bilderling.

5th corps (54th and 61st divisions).

6th Siberian corps (55th division and Orenburg Cossacks).

17th corps (3rd and 35th divisions).

	Rifles.	Sabres.	Guns.	Engineers.
Total.	60,000	2,000	250	2,000

South-west of Mukden

2nd army, General Kaulbaurs.

1st Siberian corps (1st, 9th, and part of 6th East Siberian divisions).

8th corps (14th and 75th divisions).

10th corps (9th and 31st divisions).

Rifle corps (three rifle brigades).

Between the Hun and Liao rivers

Rennenkamf's western detachment.

Kossagovski's detachment.

	Rifles.	Sabres.	Guns.	Engineers.
Total	90,000	8,000	494	2,500

South of Mukden, and behind the right of 1st army

General reserve.

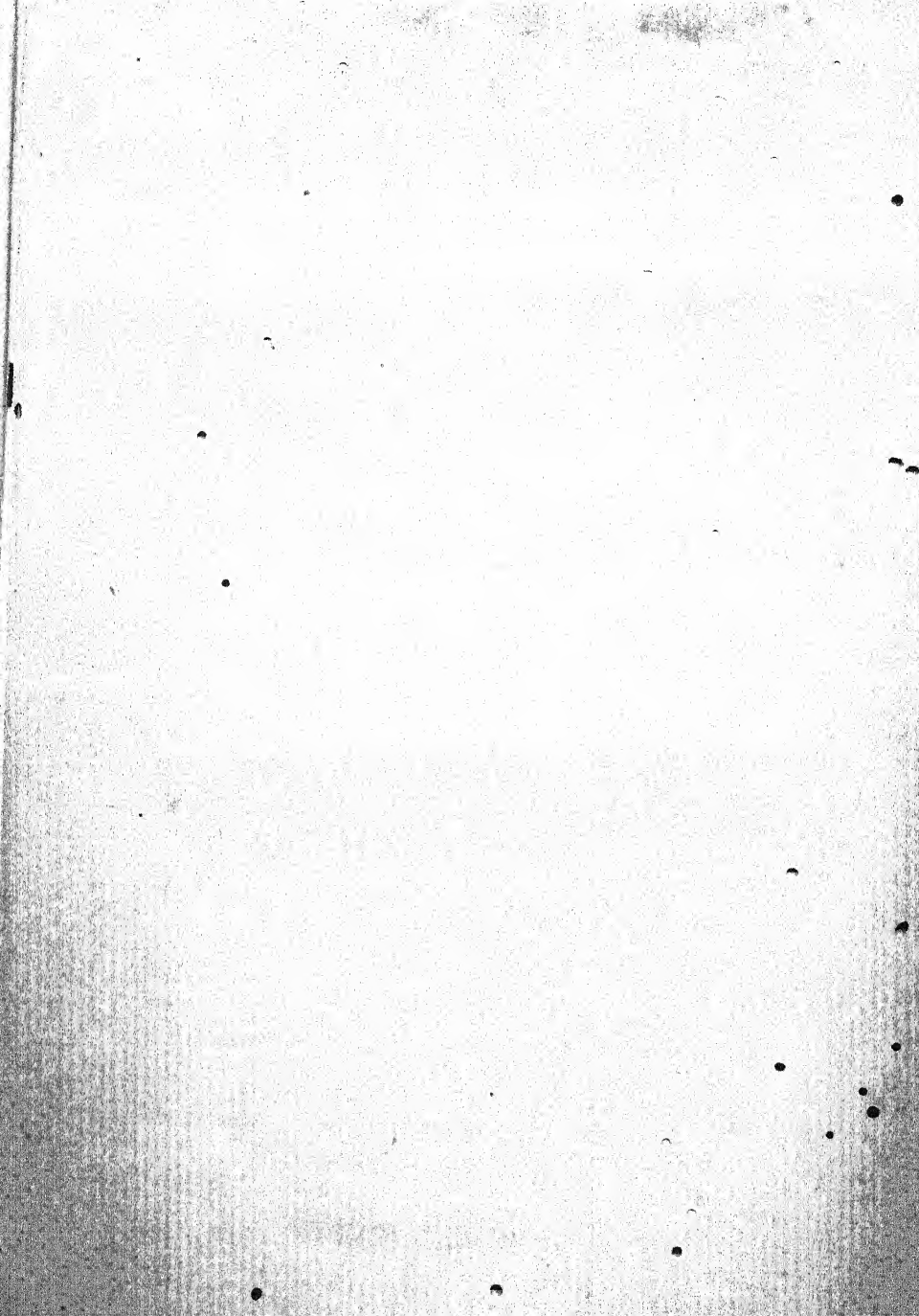
16th corps (25th and part of 41st divisions).

72nd division of 6th Siberian corps.

One infantry and one Cossack regiment.

	Rifles.	Sabres.	Guns.
Total	35,000	1,200	120

	Rifles.	Sabres.	Field Guns.
Field troops	283,700	18,000	1,230
Fortresses, etc.	20,000	3,000	80
Railways, etc.	40,000	10,000	48
	343,700	31,000	1,358



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